#### 1. ARHAR WHOLE

Common name: | | | | / | | |

English name: Red gram

Botanical name: Cajanus cajan

#### 1. Arhar whole shall be -

- Clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety
- ii. Free from any obnoxious smell and fungus infestation
- **2.** Variety (to be filled by assayer)
- 3. Actual Picture of the Lot...... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

Sr.N o	Tradable Parameters	Range-1	Range-2	Range-3	
Α.		Essential			
(i)	Moisture(% by wt) Max	10.0	12.0	14.0	
(ii)	Foreign matter (% by wt) Max	1.0	1.5	2.0	
(iii)	Other edible grains (% by wt) Max	1.0	2.0	3.0	
(iv)	Damaged grains (% by wt) Max	2.5	3.5	5.0	
(v)	Weevilled Grains (% by count) Max	3.0	5.0	10.0	
(vi)	Admixture (% by wt) Max	1.0	2.0	3.0	
(vii)	Immature & Shriveled (% by wt) Max	1.0	2.0	3.0	
В	Optional (Processor/ Industrial)				
(viii)	Uric Acid	Not more than 100mg/kg			
(ix)	Aflatoxin	Not mo	re than 30 microgr	am/kg	

#### 5. Sampling

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

- (i) Foreign matter: includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains: means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains: means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses
- (iv) Weevilled grains: means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 2. MOONG WHOLE

Common name: □□□

English name : Green gram

**Botanical name:** *Vigna radiata (L)* 

# 1. Moong whole shall be:

i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety

ii. free from obnoxious smell and fungus infestation.

**2.** Variety(to be filled by assayer)

**3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Moisture (% by wt) Max	10.0	12.0	14.0
(ii)	Foreign matter (% by wt) Max	1.0	1.5	2.0
(iii)	Other edible grains(% by wt) Max	1.0	2.0	3.0
(iv)	Damaged grains (% by wt) Max	2.5	3.5	5.0
(v)	Weevilled Grains (% by count)  Max	3.0	5.0	10.0
(vi)	Admixture (% by wt) Max	1.0	2.0	3.0
(vii)	Immature & Shriveled (% by wt) Max	1.0	2.0	3.0
B.	Optional (Ir	ndustrial/Pro	cessor)	
(viii)	Uric Acid	No	t more than 100m	ng/kg
(ix)	Aflatoxin	Not more than 30 microgram/kg		
(x)	Total of foreign matter, other edible grains and damaged grains	Not more	e than 9 percent	by weight

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration.
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses
- (iv) Weevilled grains: means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.

# 3. MASOOR WHOLE

Common name: □□□□
English name : Lentil

Botanical name: Lens culinaris

#### 1. Masoor shall be:

 clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;

ii. free from obnoxious smell and fungus infestation.

2. Variety .....(to be filled by assayer)

**3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

Sr.No	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Moisture (% by wt) Max	10.0	12.0	14.0
(ii)	Foreign matter (% by wt) Max	1.0	1.5	2.0
(iii)	Other edible grains (% by wt) Max	1.0	2.0	3.0
(iv)	Damaged grains (% by wt) Max	2.5	3.5	5.0
(v)	Weevilled Grains (% by count) Max	3.0	5.0	10.0
(vi)	Admixture (% by wt) Max	1.0	2.0	3.0
(vii)	Immature & Shriveled	1.0	2.0	3.0
	(% by wt) Max			
B.	Optiona	l (Industrial/	Processor)	
(vii)	Uric Acid	1	Not more than 100n	ng/kg
(viii)	Aflatoxin	Not	more than 30 micro	ogram/kg
(ix)	Total of foreign matter, other edible grains and damaged grains	Not m	nore than 8 percent	by weight

# 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses;
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 4. URAD WHOLE

Common name :  $\Box$ 

English name : Black gram

Botanical name: Vigna mungo



## 1. Urad shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety:
- ii. free from obnoxious smell and fungus infestation,
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr.N o	Tradable Parameters	Range-1	Range-2	Range-3
A.	E	ssential		·
(i)	Moisture(% by wt) Max	10.0	12.0	14.0
(ii)	Foreign matter(% by wt) Max	1.0	1.5	2.0
(iii)	Other edible grains(% by wt) Max	1.0	2.0	3.0
(iv)	Damaged grains(% by wt) Max	2.5	3.5	5.0
(v)	Weevilled Grains (% by count) Max	3.0	5.0	10.0
(vi)	Admixture (% by wt) Max	1.0	2.0	3.0
(vii)	Immature & Shriveled (% by wt) Max	1.0	2.0	3.0
B.	Optional (In	dustrial/Proces	ssor)	
(x)	Uric Acid	Not m	nore than 100m	g/kg
(xi)	Aflatoxin	Not more than 30 microgram/kg		
(xii)	Total of foreign matter, other edible grains and damaged grains	Not more t	han 9 percent b	y weight

## 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses .
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.

#### 5. WHEAT

Common name : □□□□□
English name : Wheat

Botanical name: Triticum aestivum (L).

#### 1. Wheat shall be-

 i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;

- ii. free from obnoxious smell and fungus infestation,
- **2.** Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Esse	Essential				
(i)	Moisture (% by wt) Max	11.0	12.0	14.0		
(ii)	Foreign matter (% by wt) Max	1.5	3.0	4.0		
(iii)	Admixture/Other edible grains (% by wt) Max	5.0	7.0	10.0		
(iv)	Immature & Shriveled Grains (% by wt) Max	3.0	5.0	7.0		
(v)	Damaged/Discoloured grains (% by wt) Max	3.0	5.0	7.0		
(vi)	Weevilled Grains (% by count) Max	4.0	6.0	10.0		
B.	Optional (Indus	trial/Proces	sor)			
(vii)	Protein (per cent. on dry matter basis)	Not less	than 11.0 (du	rum wheat)		
(viii)	Minimum Test weight (weight of 100 litre volume expressed in Kg) /Hectoliter	Not less than 70				
(ix)	Uric Acid	Not more than 100mg/kg				
(x)	Aflatoxin	Not more than 30 microgram/kg				
(xi)	Deoxynivalenol (DON)	Not more	than 1000 m	icro gm/ kg		

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration:
- (iii) Damaged/Discoloured Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 1. Maize shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety.
- ii. free from obnoxious smell and fungus infestation,
- 2. Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.	Es	sential		
(i)	Moisture (% by wt) Max	12.0	14.0	16.0
(ii)	Foreign matter (% by wt) Max	1.5	2.0	3.0
(iii)	Admixture/Other edible grains (% by wt) Max	1.0	2.0	3.0
(iv)	Damaged/ immature & Shriveled grains (% by wt) Max	7.0	10.0	15.0
(v)	Weevilled Grains (% by count) Max	4.0	6.0	10.0
B.	Optional (Inde	ustrial/ Proce	ssor)	
(vi)	Uric Acid	Not more than 100mg/kg		
(vii)	Aflatoxin	Not more than 30 microgram/kg		
(viii)	Total of foreign matter, other edible grains and damaged grains	Not more	than 9 percer	nt by weight

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 500gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.

## 7. CHANA

Common name:

English name : Bengal Gram

Botanical name: Cicer arietinum



## 1. Chana shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot...... (to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr.No	Tradable Parameters	Range-1	Range-2	Range-3
Α.		Essential	<u> </u>	
(i)	Moisture (% by wt) Max	10.0	12.0	14.0
(ii)	Foreign matter (% by wt) Max	1.0	2.0	3.0
(iii)	Admixture/Other edible grains(% by wt) Max	2.0	3.0	4.0
(iv)	Damaged/immature & Shriveled grains (% by wt) Max	4.0	5.0	7.0
(v)	Weevilled Grains (% by count) Max	3.0	6.0	10.0
B.	Optior	nal (Industrial/Proce	essor)	
(vi)	Uric Acid	Not r	nore than 100mg/k	g
(vii)	Aflatoxin	Not more than 30 microgram/kg		
(viii)	Total of foreign matter, other edible grains and damaged grains	Not more	than 9 percent by	weight

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 500gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iii) Weevilled grains means grains that are partially or wholly bored by insectsinjurious to grains but does not include germ eaten grains and egg spottedgrains.
- (iv) Admixture means the presence of a variety of the same grain other than the variety in consideration.

Common name:

English name : Pearl millet

Botanical name: Pennisetum americanum (L)

# 1. Bajra shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation
- **2.** Variety.....(to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr.N o.	Tradable Parameters	Range-1	Range-2	Range-3
Α.		Essential		
(i)	Moisture (% by wt) Max	12.0	14.0	16.0
(ii)	Admixture (% by wt) Max	1.0	2.0	3.0
(iii)	Immature & Shriveled grains(% by wt) Max	4.0	6.0	8.0
(iv)	Foreign matter (% by wt) Max	0.1	0.6	1.0
(v)	Other edible grains (% by wt) Max	3.0	4.0	6.0
(vi)	Damaged/Discoloured grains (% by wt) Max	5.0	7.0	10.0
(vii)	Weevilled Grains (% by count) Max	2.0	4.0	6.0
B.	Optional	(Industrial/Proce	essors)	
(viii)	Uric Acid	Not	more than 100m	g/kg
(ix)	Aflatoxin	Not more than 30 microgram/kg		
(x)	Total of foreign matter, other edible grains and damaged grains	Not more	than 10 percent	by weight

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration:
- (iii) Damaged/Discoloured Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration

#### 9. BARLEY

Common name :

English name : Barley

Botanical name: Hordeum vulgare(L)

# 1. Barley shall be:

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from, abnormal flavours, obnoxious smell and fungus infestation
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Moisture (% by wt) Max	11.0	12.0	14.0		
(ii)	Foreign matter (% by wt) Max	1.5	3.0	4.0		
(iii)	Admixture/Other edible grains (% by wt) Max	5.0	7.0	10.0		
(iv)	Immature & Shriveled Grains (% by wt) Max	3.0	5.0	7.0		
(v)	Damaged/Discoloured grains (% by wt) Max	3.0	5.0	7.0		
(vi)	Weevilled Grains (% by count) Max	4.0	6.0	10.0		
B.	Optional (	Industrial/P	rocessor)			
(i)	Uric Acid	١	Not more tha	n 100mg/kg		
(ii)	Aflatoxin	Not more than 30 microgram/kg				
(iii)	Total of foreign matter, other edible grains and damaged grains	Not mo	ore than 12 p	percent by weight		

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged/Discoloured Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.

10. JOWAR

Common name:

English name : Jowar

Botanical name: Sorghum bicolor

## 1. Jowar shall be-

i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;

ii. free from obnoxious smell and fungus infestation

**2.** Variety.....(to be filled by assayer)

**3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Moisture (% by wt) Max	12.0	14.0	16.0
(ii)	Admixture (% by wt) Max	1.0	2.0	3.0
(iii)	Immature & Shriveled grains(% by wt) Max	4.0	6.0	8.0
(iv)	Foreign matter (% by wt) Max	0.1	0.6	1.0
(v)	Other edible grains (% by wt) Max	3.0	4.0	6.0
(vi)	Damaged/Discoloured grains (% by wt) Max	5.0	7.0	10.0
(vii)	Weevilled Grains (% by count) Max	2.0	4.0	6.0
B.	Optional (	(Industrial/Pr	ocessor)	
(viii)	Uric Acid	No	ot more than 100mg	/kg
(ix)	Aflatoxin	Not more than 30 microgram/kg		
(x)	Total of foreign matter, other edible grains and damaged grains	Not mor	e than 10 percent b	by weight

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged/Discoloured Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration



Common name:

English name : Paddy

Botanical name: Oryza sativa (L)



# 1. Paddy shall be-

- clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- free from obnoxious smell and fungus infestation
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Moisture (% by wt) Max	17.0	18.0	20.0	
(ii)	Foreign matter (% by wt) Max	2.0	4.0	6.0	
(iii)	Admixture (% by wt) Max	10.0	15.0	20.0	
(iv)	Immature & Shriveled grains (% by wt) Max	3.0	5.0	7.0	
(v)	Damaged/ discolored & Weevilled grains (% by wt) Max	4.0	6.0	8.0	
B.	Optional (Industrial/Processor)				
(vi)	Uric Acid	Not more than 100mg/kg			
(vii)	Aflatoxin	Not more th	nan 30 microgr	am/kg	

# 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 500gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged/Discoloured Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration

Common name: □□□□□

English name: Kidney beans

Botanical name: Phaseolus vulgaris



# 1. Rajma shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Moisture (% by wt) Max	10.0	12.0	14.0		
(ii)	Foreign matter (% by wt) Max	1.0	2.0	3.0		
(iii)	Admixture/Other edible grains(% by wt) Max	2.0	3.0	4.0		
(iv)	Damaged/ immature & Shriveled grains (% by wt) Max	4.0	5.0	7.0		
(v)	Weevilled Grains (% by count) Max	3.0	6.0	10.0		
B.	Option	nal (Industrial/Proc	essor)			
(vi)	Uric Acid	Not r	nore than 100mg/kg	g		
(vii)	Aflatoxin	Not more than 30 microgram/kg				
(viii)	Total of foreign matter, other edible grains and damaged grains	Not more t	han 12 percent by	weight		

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Admixture means the presence of a variety of the same grain other than the variety in consideration

Common name: 

□□□□

English name: Finger millet

Botanical name: Eleusine coracana



# 1. Ragi shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Moisture(% by wt) Max	12.0	14.0	16.0		
(ii)	Admixture(% by wt) Max	1.0	2.0	3.0		
(iii)	Immature & Shriveled grains(% by wt) Max	4.0	6.0	8.0		
(iv)	Foreign matter (% by wt) Max	0.1	0.6	1.0		
(v)	Other edible grains (% by wt) Max	3.0	4.0	6.0		
(vi)	Damaged/Discoloured grains (% by wt) Max	5.0	7.0	10.0		
(vii)	Weevilled Grains (% by count) Max	2.0	4.0	6.0		
B.	Optional (Industrial/Processor)					
(viii)	Uric Acid	No	t more than 100mg	g/kg		

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration:
- (iii) Damaged/Discoloured Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration

Common name:

English name : Cowpea Botanical name : Vigna

sinensis

#### 1. Lobia shall be-



- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety:
- ii. free from obnoxious smell and fungus infestation
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Moisture (% by wt) Max	10.0	12.0	14.0
(ii)	Foreign matter (% by wt) Max	1.0	2.0	3.0
(iii)	Admixture/Other edible grains(% by wt) Max	2.0	3.0	4.0
(iv)	Damaged/immature & Shriveled grains (% by wt) Max	4.0	5.0	7.0
(v)	Weevilled Grains (% by count) Max	3.0	6.0	10.0
B.	Ор	tional (Industrial/F	Processor)	
(vi)	Uric Acid	No	ot more than 100mg	g/kg
(vii)	Aflatoxin	Not more than 30 microgram/kg		
(viii)	Total of foreign matter, other edible grains and damaged grains	Not mor	e than 12 percent l	by weight

## 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shriveled Grains means kernels or pieces of kernels that are not fully developed
- (vi) Admixture means the presence of a variety of the same grain other than the variety in **Optional parameters** are voluntary and may be analyzed as per buyer-seller agreement.



#### 15. BASMATI RICE

: Oryza sativa

## 1. Basmati Rice shall be:

- i. clean, wholesome, long, slender, reasonably uniform in size, shape and colour with marked degree of natural fragrance characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Essential		L	
(i)	Length		6.61mm and	above	
(ii)	Length- breadth ratio		3.5 and a	above	
(iii)	Moisture (% by wt) Max	12.0	13.0	14.0	
(iv)	Foreign matter (% by wt) Max	0.40	0.50	0.60	
(v)	Broken/Damaged/Chalky grains (% by wt) Max	8.5	13.0	17.0	
(vi)	Red /Green grains/Paddy Grains (% by wt) Max	5.0	7.0	9.0	
(vii)	Other varieties of rice (% by count) Max	7.0	10.0	15.0	
B.	Optional (I	ndustrial/Proce	ssor)		
(viii)	Average cooked rice length	12	2.0 mm and above	9	
(ix)	Average volume expansion ratio		More than 3.5		
(x)	Average pre-cooked milled rice breadth	Not more than 2 mm			
(xi)	Elongation ratio after cooking	Not less than 1.7			
(xii)	Alkali Spreading Value		4 to 7		
(xiii)	Amylose content (%)		20 to 25		

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Other variety of rice means any the presence of a variety of the same rice grain other than the variety under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Broken grains means pieces of sound kernels that are less than three fourths of the size of full kernels.
- (v) Chalky Grains are pieces of kernels of which at least half the portion is opaque, milky white in colour and brittle in nature.
- (vi) Red grains shall be the kernels, whole or broken which have their surface coated with red **Optional parameters** are voluntary and may be analyzed as per buyer-seller agreement.



## 16. White Peas

Common name: DDDD | Mochai (TAMIL)/ Vella

pattaani (Malyalam)/Thella Bataaneelu (Telegu)

English name:White Peas

Botanical name: Lathyrus sativus

## 1. White Peas shall be-

- i. intact, firm, clean, reasonably uniform size, & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell, smoke, burn
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Essential		1	
(i)	Moisture (% by Weight) Max	12.0	12.0	14.0	
(ii)	Foreign matter (% by Weight) Max	1.0	1.5	2.0	
(iii)	Other edible grains (% by Weight) Max	1.0	2.0	3.0	
(iv)	Damaged grains(% by Weight) Max	3.0	4.0	5.0	
(v)	Weevilled grains (% by Weight) Max	7.0	9.0	10.0	
B.	Optiona	I (Industrial/P	rocessor)		
(vi)	Uric Acid	N	ot more than 100m	ng/kg	
(vii)	Aflatoxin	Not more than 30 microgram/kg			
(viii)	Total of foreign matter, other edible grains and damaged grains	Not more than 12 percent by weight			

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 250 g shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

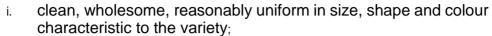
- (i) Foreign matter:- shall include sand, dirt, stones, glass and metallic pieces, lumps of earth, clay and mud, husk, chaff, straw, weed seeds and other inedible grains.
- (ii) Damaged and Discolored seeds: -Kernels or pieces of kernels that are sprouted or internally damaged as a result of heat, moisture, weather or microbes, and mechanical injured grains in case of whole pulses; discoloured, or discolouration materially affecting the quality.
- (iii) Other edible grain/seeds:- means any edible grains (including oil seeds) other than the one which is under consideration;
- (iv) Weeviled grains:-means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.

#### 17. CASTOR SEED

Common name : Gastor Seed : Castor Seed

Botanical name: Ricinus communis (L)

## 1. Castor Seed shall be-



ii. free from obnoxious smell and fungus infestation.

2. Variety ..... (to be filled by assayer)

**3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Oil Content (% by wt) Min	47.0	45.0	40.0	
(ii)	Foreign matter (% by wt) Max	1.5	2.5	3.5	
(iii)	Damaged and discoloured seeds (% by wt) Max	4.0	6.0	7.0	
(iv)	Broken Seeds (% by wt) Max	1.0	2.0	3.0	
(v)	Moisture (% by wt) Max	5.0	6.0	7.0	
B.	Optional (Industrial/Processor)				
(vi)	Admixture	e Not more than 2 percent by weight			
(vii)	Fotri (Husk)	Not more the	nan 5 percent	by weight	

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

# 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Damaged and Discoloured seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iii) Broken seeds are pieces of sound kernels that are less than three fourths of the size of full kernels.



#### 18. MUSTARD SEED

Common name: 

Butter of the common c

## 1. Mustard Seed shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation
- **2.** Variety ...... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential	•	
(i)	Oil content (% by wt) Min	42.0	38.0	36.0
(ii)	Moisture (% by wt) Max	8.0	9.0	10.0
(iii)	Foreign matter (% by wt) Max	2.0	3.0	4.0
(iv)	Damaged and discoloured seeds (% by wt) Max	2.0	3.0	5.0
(v)	Other Edible Seeds (% by wt) Max	0.5	0.8	1.0
(vi)	Argemone seeds	Absent		
B.	Ор	otional (Industrial/Processor)		
(vii)	Allyl iso thiocynate (m/m) on dry basis	Not less th	an 0.7 percent by	weight

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mudand animal filth etc.
- (i) Damaged and discoloured seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (i) are pieces of sound kernels that are less than three fourths of the size of full kernels.
- (iv)Other Edible seeds means any edible seed other than the one which isunder consideration

#### 19. SOYABEAN

Common name:

English name : Soyabean

Botanical name: Glycine max (L)

# 1. Soyabean Seed shall be-

i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;

ii. free from obnoxious smell and fungus infestation.

**2.** Variety.....(to be filled by assayer)

**3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Essential				
(i)	Oil content (% by wt) Min	20.0	18.0	13.0		
(ii)	Moisture (% by wt) Max	7.0	9.0	12.0		
(iii)	Foreign matter (% by wt) Max	1.5	2.0	3.0		
(iv)	Damaged seeds (% by wt) Max	3.0	5.0	7.0		
(v)	Other edible seeds (% by wt) Max	1.0	3.0	6.0		
(vi)	Weevilled Seeds (% by count) Max	3.0	4.0	5.0		
B.	Optional (Industrial/Processor)					
(vii)	Green Seed	Not more than 7.0 percent by weight				
(viii)	Protein	Not less the	nan 34.0 percen	t by weight		

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 g shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (i) Other Edible seeds means any edible seed other than the one which is under consideration:
- (i) Damaged seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled seeds are partially or wholly bored by insects injurious to seed but donot include germ eaten seeds and egg spotted seeds.



## 20. PEANUT KERNEL

Common name: \( \begin{aligned} \Boxed \quad \Boxed \Boxed \quad \Boxed \quad \Boxed \Rightarrow \quad \Rightarrow \quad

(Telugu)English name: Peanut (deshelled), Groundnut

kernel (deshelled)

Botanical name: Arachis hypogaea



## 1. Peanut shall be-

- i. intact, firm, clean, reasonably uniform size & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell, smoke, burn
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Essential					
(i)	<b>Moisture</b> (% by Weight) Max	5.0	6.0	7.0			
(ii)	Damaged kernel including slightly damaged, discoloured kernel (% by Weight) Max	3.0	4.0	5.0			
(iii)	Immature & Shriveled (% by Weight) Max	2.0	3.0	4.0			
(iv)	Foreign matter (% by Weight) Max	0.5	1.0	2.0			
B.	Optional (Industrial/Processor)						
(v)	Aflatoxins	Not more	e than 30 parts	per billion			

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 200 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

- (i) Foreign matter: means stones, dirt, clay or any other edible/nonedible seeds such as mahua, caster, neem orargemone.
- (ii) Immature and shriveled kernel: are those kernels which are imperfectly developed and /or shrunken.
- (iii) Damaged kernel: are those kernels that are damaged mechanically or by mould, weevil or any other insect attack or those showing internal discoloration materially affecting the quality.

## 21. SUNFLOWER SEED

Common name: 

□ □□□ □□□

English name : Sunflower

Botanical name: Helianthus annus (L)



## 1. Sunflower seed shall be-

- i. clean, wholesome, nearly reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr. No	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
i.	Oil Content (% by wt) Min	28.0	25.0	22.0
ii.	Moisture (% by wt) Max	4.0	4.5	5.0
iii.	Foreign matter (% by wt) Max	2.0	4.0	6.0
iv.	Damaged seeds (% by wt) Max	4.0	5.0	6.0
B.	Optiona	I (Industrial/Pro	cessor)	
∨iii.	Admixture	Not more	than 2 percer	nt by weight

## 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Damaged seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.

## 22. KUSUM SEED

English name: Kusum

Botanical name: Schleichera oleosa



## 1. Kusum seed shall be-

- i. clean, wholesome, nearly reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2 Variety.....(to be filled by assayer)
- 3. Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.	Ess	sential		
(i)	Oil Content (% by wt) Min	32.0	30.0	28.0
(ii)	Moisture (% by wt) Max	6.0	6.5	7.0
(iii)	Foreign Matter (% by wt) Max	1.5	2.5	4.0
(iv)	Damaged seeds (% by wt) Max	3.0	5.0	7.0
B.	Optional (Industrial/Processor)			
(v)	Acid value of the extracted oil	Not more	e than 8 perce	nt by weight

## 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (ii) Damaged seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.

## 23. SESAME SEED

Common name: □□□

English name: Sesame seed

Botanical name: Sesamum indicum



## 1. Sesame seed shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No	Tradable Parameters	Range- 1	Range- 2	Range-
A.	Essen	tial		
(i)	Oil Content (% by wt) Min	45.0	40.0	35.0
(ii)	Moisture (% by wt) Max	5.0	6.0	7.0
(iii)	Foreign matter (% by wt) Max	1.0	1.5	2.0
(iv)	Damaged seed (% by wt) Max	1.0	2.0	3.0
(v)	Admixture of other varieties (%by wt) Max	10.0	15.0	20.0
B.	Optional (Industrial/Processor)			
(vi)	Total of Immature , shriveled, dead , damaged, discloured seeds by weight	Not m	ore than 5	percent

# 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iii) Admixture means the presence of a variety of the same seed other than the variety in consideration

## 24. NIGER SEED

Common name: | | | | | | /Uchellu (Tamil)

Valisalu (Telegu)/ □□□□□□(Marathi)

English name : Niger Seed Botanical name: Guizotia

abyssinica



# 1. Niger Seed shall be-

- intact, firm, clean, reasonably uniform size & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot ......( to be uploaded by assayer)

4. Criteria for Range designation:

S.No	Tradable Parameter	Range-1	Range-2	Range-3			
A.	Essential						
(i)	Oil Content (% by Weight) Min	30.0	25.0	20.0			
(ii)	<b>Moisture</b> (% by Weight) Max	7.0	8.0	9.0			
(iii)	Extraneous Matter (% by Weight) Max	1.0	2.0	3.5			
(iv)	Broken seeds (Damaged, shriveled, discoloured and immature seed) (% by Weight) Max	3.0	4.0	5.0			
(v)	Insect damaged seeds (% by Weight) Max	0.5	0.75	1.0			
B.	Opt	ional (Industrial/P	rocessor)				
(vi)	Total of Immature , shriveled, dead , damaged, discolored and slightly damaged Seeds	Not more	than 5 percent by	y weight			

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 250 g shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

- (i) Extraneous /Foreign matter:- Includes inorganic and organic matter. The inorganic matter shall include sand, gravel, dirt, pebbles, stones, glass and metallic pieces, lumps of earth, clay and mud. Organic matter shall include husk, chaff, straw, weed seeds and other inedible grains.
- (ii) Broken seeds: -Kernels or pieces of kernels that are sprouted or internally damaged as a result of heat, moisture, weather or microbes, discoloured, and immature seed.
- (iii) Insect damaged seeds: shall be those seeds which are wholly or partly bored or eaten by the weevils.

#### 25. SAL SEED

Common name:  $\Box \Box \Box \Box \Box \Box \Box$  /Venkungiliyam (Tamil)/

Karimauthu with (Malayalam)/ Guggilam (Telegu)/

(Marathi) English name: Sal seed Botanical name: Shorea robusta

#### 1. Sal Seed shall be-



- i. intact, firm clean, reasonably uniform size & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable parameter	Range- 1	Range-2	Range-3	
A.	Essential				
(i)	Oil content (% by Weight) Min	14.0	10.0	8.0	
(ii)	Moisture (% by Weight) Max	11.0	11.0	11.0	
(iii)	Extraneous matter (% by Weight) Max	1.5	3.0	4.0	
(iv)	Broken seeds (Damaged, shriveled, discoloured and immature seed) (% by Weight) Max	9.0	11.0	12.0	
(v)	Insect damaged seed (% by Weight) Max	3.0	5.0	6.0	
B.	Optional (Industrial/Processor)				
(vi)	Admixure Not more than 5 percent by weight				

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 200 g shall be drawn from each selected container and shall be mixed homogenously will be called as primary sample
- (iii) 200 g shall be drawn from primary sample will be called as Laboratory sample

## 6. Definitions:

- (i) Extraneous /Foreign matter:- Includes inorganic and organic matter. The inorganic matter shall include sand, gravel, dirt, pebbles, stones, glass and metallic pieces, lumps of earth, clay and mud. Organic matter shall include husk, chaff, straw, weed seeds and other inedible grains.
- (ii) Broken seeds: -Kernels or pieces of kernels that are sprouted or internally damaged as a result of heat, moisture, weather or microbes, discoloured, and immature seed.
- (iii) Insect damaged seeds: shall be those seeds which are wholly or partly bored or eaten by the weevils.

## **26. COTTON SEED**

Parathi kuru (Malyalam)/ Patti Vittanam (Telugu) English name :Cotton Seed

Botanical name: Gossypium spp.



**Actual Picture for illustration** 

## 1. Cotton seed shall be-

- i. intact, firm, clean, of same variety and
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot ......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Oil Content (% by Weight) Min	15.0	15.0	10.0	
(ii)	Moisture (% by Weight) Max	10.0	11.0	12.0	
(iii)	Foreign matter (% by Weight) Max	1.0	2.0	4.0	
(iv)	Damaged seed (% by Weight) Max	3.0	4.0	5.0	
B.	Optional (Industrial/Processor)				
(v)	Linters	Not more th	an 10 percent b	y weight	

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 g shall be drawn from each selected container shall be mixed homogenously called as primary sample.
- (iii) 250 g shall be drawn from primary sample will be called as Laboratory sample

## 6. Definitions:

- (i) Foreign matter:-All foreign material other than cottonseed material, where cottonseed material includes cotton fiber attached to the seed coat.
- (ii) Damaged seeds: -Includes smutty seed, hot seed, musty seed, sour seed, rotted seed and mouldy seed.

## 27. PONGAM SEED

English name: Pongam seeds

Botanical name: Pongamia

pinnata



**Actual Picture for illustration** 

# 1. Pongam Seed shall be-

- i. intact, firm, clean, reasonably uniform size, & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Oil content (% by Weight) Min	30	25.0	20.0		
(ii)	Moisture (% by Weight) Max	11.0	11.0	11.0		
(iii)	Foreign matter (% by Weight) Max	1.5	3.0	4.0		
(iv)	Broken seeds (% by Weight) Max	9.0	11.0	12.0		
B.	Optional (Industrial/Processor)					
(v)	Admixture	Not mor	e than 5 perce	nt by weight		

## 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 250 g shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

- (i) Foreign matter:- Includes inorganic and organic matter. The inorganic matter shall include sand, gravel, dirt, pebbles, stones, glass and metallic pieces,lumps of earth, clay and mud. Organic matter shall include husk, chaff, straw, weed seeds and other inedible grains.
- (i) Broken seed:- Pieces of sound kernels that are less than three fourths of the size of the full kernels

Common name: □□□

English name : Apple

Botanical name: Malus pumila

(L)

Varieties name: Apple Kashmiri, Kinnor, Royal

Delicious, Royal Gold, Apple Golden, American, Pittu etc



# 1. Apples shall be-

- i. intact, firm, clean, of reasonably uniform size & shape, color (Red/Yellowish/Pinkish Green/Greenish Red) characteristics to the variety
- ii. free from bruises, soft patches, insect/mechanical injury, visible disorders, fungal infestation.
- 2. Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable parameters	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Size (Diameter (mm) of the equatorial section) For all varieties	Up to 90	Up to 70	Up to 50		
(ii)	Defects (% by count) (Max) (i) Dry Healed Hail (2-5 sq.cm of total surface area)	10	15	20		
	(ii) Russetting (2-5 sq.cm of total surface area)	2	4	6		
	(iii) Soft Patch (2-5 sq.cm of total surface area)	2	4	6		
(iii)	Range Acceptance	90 %	85 %	80 %		
B.	Optional (Industrial/Processor)					
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*)  /Visual  (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

Common name:

English name : Pear

Botanical name: Pyrus communis

Varieties name: Naashpaati, Pear Kashmir, William, Kashmir Nakh, Vicar of Wakefield, Beuree D Amanlis, Goshbagu, Babugosa, Beurre

Hardy etc.



## 1. Pears shall be-

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell.
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
Α.	Essential					
(i)	Size (mm) Pear Shimla/Babugosa Pear Kashmiri Pear Nakh	Above 55 Above 45 Above 65	45-55 40-45 65-50	Below 45 Below 40 Below 50		
(ii)	Defects % by count (Max):- (i) Colour (0.5 to 1 sq. cm. of total surface area)	2%	5%	10%		
	(ii) Skin defects (bruising, brown spots) (0.5 to 2 sq. cm. of total surface area)	5%	10%	15%		
(iii)	Range Acceptance	95 %	90 %	85 %		
B.	Optional (Industrial/Processor)					
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

## 30. ORANGE

Common name:

English name: Mandarin Botanical

name: Citrus reticulata

Varieties name: Kinnow mandarin, Darjeeling

Mandarin, Sumithra mandarin



## 1. Mandarins shall be -

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell,
- **2.** Variety ......(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
Α.	Essential				
(i)	Size in mm (diameter of the equatorial section)	66 to 80mm	55 to 65mm	Above 80 & Below 55	
(ii)	Defects % by count (Max):- (i) Discoloration (0.5 to 5 sq cm of total surface area)	2%	5%	10%	
	(ii) Slight bruising/minor cut/ (0.5 to 2 sq cm of total surface area)	2%	5%	10%	
(iii)	Range Acceptance	95 %	90 %	85%	
B.	Optio	onal (Industrial/Prod	essor)		
(iv)	Total soluble solids (TSS) (minimum) in degree Brix ( Min)	8	6.5		
(v)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

Common name: □□□□

English name: Sapodilla Botanical

name: Manilkara zapota

Varieties name: Cricket ball, Kalipatti, Calcutta round, DHS-

1,DHS-2, Baramasi, Baharu, Gandhevi Barada etc.



# 1. Sapota shall be-

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety
- ii. Sapota shall not be very soft, shriveled or water soaked.
- iii. Free from, visible foreign matter, abnormal external moisture, foreign smell,
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essenti	al	
(i)	Size (diameter of the equatorial section))	Above 50mm	Above 40mm	Below 40mm
(ii) (iii)	Defects % by count (Max):- Skin defects (scratches scars, scrapes and blemishes)	10 %	15 %	20%
(iv)	Range Acceptance	95 %	90 %	85%
B.	Optional (Industrial/Processor)			
(v)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

## 32. MUSK MELON

Common name:

English name: Musk melon Botanical name: Cucumis

melo

Varieties name: Arka rajhans, Hara Madhu, Pusa Asaarbati, Arka Jest, Durgapura Madhu, Punjab sunahari, Lanow safed,

Annamalai,



## 1. Musk Melons shall be-

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell,
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Essentia	il			
(i)	Weights (gms)	Above 500 to 1500	Above 300 to 500	Below 300		
(ii)	Defects % by count (Max):- Superficial Crack & Bruises (1-3sq. cm. of total surface area)	5%	10%	15%		
(iii)	Range Acceptance	95 %	90 %	85%		
B.		Optional (Industrial/Processor)				
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

## 5. Sampling: -

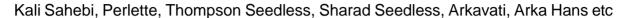
- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

Common name: □□

English name: Grapes Botanical name: Vitis

vinifera

Varieties name: Anab-e-Shah, Bangalore Blue, Bhokri, Gulabi,





# 1. Bunches and berries of Table grapes shall be-

- i. intact, clean, firmly attached to the stalk, of reasonably uniform size, color characteristics to the variety
- ii. free from insect infestation, water sacs, shrivel age, foreign smell, mould
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Defects:- (% by count) Max  (i) Discolouration (per bunch)	4%	6%	8%		
		Up to 200	Up to 150	Up to 100		
	(ii) Bunch size/weight (gm)	(evenly spaced along the stalk)	(less evenly spaced along the stalk than in the Range-1)	(less evenly spaced along the stalk than in the Range-2)		
(ii)	Range Acceptance	95 %	90 %	85%		
B.	Optional (Industrial/Processor)					
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*)/Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		
(iv)	Total soluble solids (TSS) % (minimum)		16 degree Brix			

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 200 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample

Common name: □□□□
English name: Litchi
Botanical name:Litchi

chinensis

Varieties name: Shahi, Swarna Roopa, China, Kasba, Elachi, Purbi, Early Seedless, Rose Scented etc



## 1. Litchi shall be:-

- i. intact, firm, clean, firmly attached to the stalk, of reasonably uniform size, color(Red/Orange) characteristics to the variety
- ii. free from soft brown patches on the skin, insect infestation, other visible defects
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Essential					
(i)	Defects (% by count) (Max):- (i) Discolouration (1-3 sq cm of total surface area)	10%	15%	20%			
	(ii) Shriveled	2%	5%	7%			
(ii)	Size/weight of the bunch	Not less than 500 gm (Litchis must be firm, firmly attached to the stalk, loose	Not less than 400 gm  (Litchis must be firm, firmly attached to the stalk, loose berries	Not less than 300 gm (Litchis must be firm, firmly attached to the stalk, loose			
		berries shall not be more than 2 %)	shall not be more than 4 %)	berries shall not be more than 6 %)			
(iii)	Range Acceptance	95 %	90 %	85%			
B.		Optional (Indus	trial/Processor)				
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40			
(v)	Size equatorial diameter (minimum)	33 mm	28 mm	23 mm			

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously , called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

### 35. POMEGRANATE

Common name: 

□□□□

English name: Pomegranate

Botanical name: Punica granatum

Varieties name: Bhagava, Ganesh, Arakta, Mrudula, Muskat, Jyoti, Ruby, Dholkaetc.



# 1. Pomegranates shall be:

- intact, firm, clean, firmly attached to the stalk of reasonably uniform size, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell,
- **2.** Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3			
<b>A.</b>		Essential Essential					
(i)	Size (mm)	Upto 90 mm	Upto 75	Upto 65			
(ii)	Defects % by count (Max):-						
	Slight bruising (2-5sq. cm. of total surface area)	2%	5%	10%			
(iii)	Range Acceptance	95 %	90 %	85%			
B.	Optional (Industrial/Processor)						
(iv)	Weight in Grams (minimum)	More than 300	More than 200	Less than 200			

### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

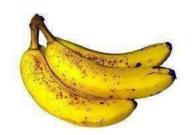
#### 36. BANANA

Common name: □□□
English name: Banana

Botanical name: Musa acuminata

Varieties name: Dwarf Cavendish, Robusta, Rasthali,

SafedVelchi Musa, Karpuravalli, Monthan etc.



### 1. Bananas shall be -

- i. intact, firm, clean, firmly attached to the stalk of reasonably uniform size, color (Green/Yellow/Golden Yellow) characteristics to the variety
- ii. free from chitti, insect infestation, cuts, mechanical injury,
- iii. Bananas shall not be over ripened /under ripened
- 2 Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

SI.No.	Tradable Parameters	Range-1	Range-2	Range-3		
Α.		Essential				
(i)	Defects (% by count) (Max) (i) Cut/ Bruising (10 to 20mm of total surface area)	5	10	Above 10		
	(ii) Chitti (5-10mm of surface area)	5.0	8.0	Above 8.0		
	(iii) Black spot (5-10mm of surface area)	2.0	4.0.	Above 4.0		
(ii)	Range Acceptance	95 %	90 %	85%		
B.	Optional (Industrial/Processor)					
(iii)	Sizing characteristics		ength should not b nimum grade not l			

### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Lungars shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 03 bunches shall be drawn from primary sample called as Laboratory sample

Common name:

English name: Plum

Botanical name: Prunus domestica

Varieties name: Kala Amritsari, Satluj purple,

Jamuni Merruti, Titron,

Katari chak, Alu Bukhara, Howe, Alpha, Alucha Black etc.



### 1. Plums shall be-

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell,Mold/ Fungal infested.
- **2** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
Α.		Essential				
(i)	Size (mm)	Above 40	30 to 39	Below 30		
(ii)	Defects % by count (Max):- Slight bruising/ hail patches ( 0.5 -1 sq. cm of total surface area)	3%	5%	7%		
(iii)	Range Acceptance	95 %	90 %	85%		
B.		Optional (Indus	trial/Processor)			
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40		

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

### BB. PEACH

Common name: □□□

English name: Peach

Botanical name: Prunus persica

Varieties name: TA-170, Shan-e-Punjab Flordasun, Sharbatietc.



### 1. Peach shall be-

- i. intact, firm, clean, of reasonably uniform size, & shape, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell,
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Size (mm)	Above 45	35 to 45	Below 35	
(ii)	Defects % by count (Max):- Slight bruising/ soft patches ( 0.5 -1 sq. cm of total surface area)	3%	5%	7%	
(iii)	Range Acceptance	95 %	90 %	85%	
B.	Opt	ional (Industri	al/Processor)		
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

Common name: □□

English name: Mango Botanical

name: Mangifera indica

Varieties name: Dusherry,

Alphanso, Totapuri, Baneshan, Safeda, Malda, Malda, kesar

etc



### 1. Mangoes shall be-

- Fully developed, matured, clean, of reasonably uniform size & color (Yellow/Reddish, Yellow/Reddish Green) characteristics to the variety
- ii. free from, insect infestation, internal spongy tissues, visible foreign matter, foreign smell,
- **2.** Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot...... ( to be uploaded by assayer)

### 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Essential				
(i)	Size by Weight (in gm)  For all varieties	Up to 500	Up to 200	Up to 100		
(ii)	Defects (% by count) (Max)  Cut skin/Bruising (10 to 30 mm of total surface area)	10%	15%	20%		
(iii)	Range Acceptance	90 %	85 %	80%		
B.		Optional (Industr	ial/Processor)			
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample,

### **40. SWEET ORANGE**

Common name:

English name: Sweet Orange

Botanical name: Citrus

aurantium

Varieties name: Mosambi, Malta (Common), Malta (Blood

Red), Sathqudi etc.



### 1. Mosambi shall be-

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety.
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell.
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	<b>Size</b> (Diameter)	Upto 80mm	Upto 65 mm	Upto 55 mm
(ii)	Defects % by count (Max):- Scratches scars, scrapes and blemishes (0.5-2 sq. cm. of total surface area)	3%	5%	7%
(iii)	Range Acceptance	95 %	90 %	85%
В	Opti	onal (Industrial/	Processor)	
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40
(v)	Total soluble solids	N	ot less than 10 o	degree brix

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

### 41. CUSTARD APPLE

Common name: 

□□□□□

English name: Custard Apple

Botanical name: Annona reticulata

Varieties name: Balanagar, Arka Sahan, Barbados Seedling,

Kakarlapahad, British Guinea, Mahboobnagar,

Saharanpur local, Washington etc.



# 1. Custard apple shall be-

- i. intact, firm, clean, & color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Essential					
(i)	Size (Diameter)	Above 60 mm	50 to 60 mm	Below 50 mm			
(ii)	Defects % by count (Max):- Blemishes, scars, sunspots (0.5-2 sq. cm. of total surface area)	3%	5%	10%			
(iii)	Range Acceptance	95 %	90 %	85 %			
	Optional (Industrial/Processor)						
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40			

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously , called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

### **42. WATERMELONS**

English name: Watermelon Botanical name: Citrullus

lanatus

Varieties name: Sugar Baby and Arka Manik, PKM

1, Arka Jyoti and Pusa Bedana



### 1. Watermelons shall be -

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- 2. Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... (to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Weight (kgs)	above 5 to 10	2 to 5	Below 2
(ii)	Defects % by count (Max):-  Colour (paler part of any region including	10%	15%	20%
(iii)	bruises)  Range Acceptance	95 %	90 %	85 %
B.	Optio	nal (Industrial/P	rocessor)	
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40
(v)	Total Soluble Solids	Not less	than 10 degr	ee brix

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 3 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 3 nos. shall be drawn from primary sample called as Laboratory sample.

### 43. LEMON

Common name:

English name: Lemon Botanical name: *Citrus* 

limon

Varieties name: Kargzi lime, Assam lemon, Italian lemon, Pant lemon, Galgal, Eureka lemon, Sevilla, Malta lemon, Vikram, Prumalini, PKM, and Sai Sharbati etc.



### 1. Lemons shall be-

- intact, firm, clean, of reasonably uniform size, & shape, color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell ,Mold infestation
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Essentia	al		
(i)	<b>Size</b> (Diameter)	Above 30 mm	20 to 30 mm	Below 20 mm	
(ii)	Defects % by count (Max):- (i) Colour  (ii) Scratches scars, scrapes and blemishes (0.5-1 sq. cm. of total surface area)	3 % 3%	5% 5%	7% 7%	
(iii)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40	

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

### 44. GUAVA

Common name: \( \propto \propt

/□□□□(Marathi)

English name:Guava

Botanical name: Psidium guajava

Variety Name: Allahabad safeda, Lucknow 49, Anakapalli, Banarasi, Chittidar, Hafshi, Sardar, Smooth Green, Safed Jam,

Arka Mridula,-49, Lucknow Safeda, Apple Colour, Chittidar, Red Fleshed, AllahabadSurkha, Mirzapuri Seedless, CISH-G-1, CISH-G-2, CISH-G-3

### 1. Guava shall be-

- i. Wholesome, firm, fresh, clean, of same variety and
- ii. Free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3		
A.		Essential				
(i)	Size mm	50 to 90	Below 50 and more than 90	Below 50 and more than 90		
(ii)	Defects % by count (Max):-					
	Skin defects (Bruising/scratches/ Sunburn)	5%	10%	15%		
(iii)	Range Acceptance	95 %	90 %	85 %		
	Opti	ional (Industri	al/Processor)			
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40		

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample



### 45. JACKFRUIT

Common name: □□□□ /Palapazham (Tamil)/chakka (Malayalam)/ Panasa (Telugu)/□□□ (Gujarati & Marathi)

English name: Jackfruit

Botanical name: Artocarpus heterophyllus



#### 1. Jackfruit shall be -

- i. Wholesome, firm, fresh, clean, of same variety and
- ii. Free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Defects % by count (Max):-				
	Irregular Shape maturity development	2%	4%	6%	
	Skin defects	3%	5%	10%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	O	ptional (Industrial/	Processor)		
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 3 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- ii) 3 nos. shall be drawn from primary sample called as Laboratory sample

(iii)

Common name:  $\Box \Box \Box$ ,  $\Box \Box \Box$  Naarinja (Telugu)

English name: Mandarin Botanical

name: Citrus reticulata



### 1. KINNOW shall be -

- i. Wholesome, firm, fresh, clean, of rind moderately thick, of reasonably uniform size, & shape, color characteristics to the variety
- ii. Free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot.....( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range- 1	Range-2	Range-3	
A.	Essential				
(i)	Defects % by count (Max):- (i) Discolouration (1-4 sq cm of total surface area	2%	4%	6%	
	(ii) Skin defects due to rubbing (Bruising/scratches) (1-4 sq cm of total surface area)	2%	4%	6%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

### 47. RAW MANGO (For Pickles)

(Gujarati)English name: Raw Mango

Botanical name: Mangifera indica



## 1. Raw mangoes shall be-

- i. Firm, Wholesome, fresh, clean, of same variety and
- ii. Free from visible foreign matter, abnormal external moisture, foreign smell
- 2 Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot ..... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3		
A.		Essential				
(i)	Hardness Very hard Hard			Slight hard		
(ii)	Color	Dark Green	Green	Light Green		
(iii)	Defects (Max):- Cut, Bruising/scratch es (5mm to 15)	5%	10%	Above 10%		
(iv)	Range Acceptance	95 %	90 %	85 %		
B.		Optional (Indu	ıstrial/Processor)			
(v)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

#### **48. ONION**

Common name: 

□□□□□

English name :Onion Botanical name: Allium cepa

(L)

Varieties name: Bhima Raj, Bhima Red, Bhima Super, Bhima Super,

Bhima Shakti, Bhima Shweta, PAU, Ludhiana, Pusa Red, N-2-4-1, Pusa Madhavi, NHRDF,

Nasik, Early Grano, Arka Niketan, Arka Kalyan etc

### 1. Onion shall be-

- i. dry, intact, clean, of reasonably uniform size, & shape, color characteristic to the variety,
- ii. free from sprouting, seed stem, double split, staining, insect infestation, soft root.
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

SI.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects (% by count) (Max)			
	(i) Cut (5-15mm long)	5.0	10.0	15.0
	(ii) Double split	2.0	5.0	Above 8.0
	(iii) Sprouted	2.0	5.0	Above 8.0
	(iv) Rooting	2.0	5.0	Above 8.0
(ii)	Size (maximum diameter of the equatorial section)	Up to 65 mm	Up to 45mm	Up to 25 mm
B.	Optional (Industrial/Processor)			
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

### 5. Sampling.

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 500 g shall be drawn from primary sample called as Laboratory sample



Common name: □□□

English name: Potato

Botanical name: Solanum tuberosum

Varieties name: Kufri Sindhuri, Kufri Chandramukhi, Kufri Jyoti, Kufri Lauvkar, Kufri Badshah, Kufri Bahar, Kufri

Lalima, Kufri



#### 1. Potato shall be-

- firm, fresh, of reasonably uniform size, shape & colour characteristic to the variety
- free from rotten spot, greening, chitti, cracks, cuts, major wholes, mechanical injury
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

SI.No.	Tradable Parameters	Range-1	Range-2	Range-3
Α.		Essentia	al	
(i)	Defects (% by count) (Max) (i) Cracks/cut (5 mm to 20mm)	5%	10%	Above10%
	(ii) Greening (1-3 sq cm of total surface area)	2.0	3.0	Above 3.0
	(iii) Holes	1.0	2.0	Above 2
	(iv) Mechanical injury	2.0	3.0	Above 3.0
(ii)	Size (mm) (maximum diameter of the equatorial section)	Up to 70	Up to 55	Up to 25
(iii)	Range Acceptance	90%	85%	80%
B.	Optional (Industrial/Processor)			
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 1Kg shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 500g. shall be drawn from primary sample called as Laboratory sample



Common name:

English name : Tomato

Botanical name: Solanum lycopersicum

Varieties name :Arka Saurabh, Arka Vikas, Arka Ahuti, Arka Ashish, Arka Abha , Arka Alok, HS101, HS102, HS110, Hisar Arun, Hisar Lalima, Hisar Lalit, Hisar Anmol, KS.2, Narendra Tomato 1, Narendra Tomato 2, Pusa



Red Plum, Pusa Early Dwarf, Pusa Ruby, Co-1, CO 2, CO 3, S-12, Punjab Chhuhara, PKM 1, Pusa Ruby, Paiyur-1, Shakthi, SL 120, Pusa Gaurav, S 12, Pant Bahar, Pant T3, Solan Gola and Arka Meghali etc

#### 1. Tomatoes shall be-

- i. intact, firm, clean, of reasonably uniform size& shape, color characteristics to the variety
- ii. free from insect damage, mechanical injury, rotten spot, over ripening
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

SI.No.	Tradable Parameters	Range-1	Range-2	Range-3	
Α.	Essential				
(i)	Defects (% by count) (Max) (i) Dry crack/cut (5-10mm)	2.0	3.0	Above 3.0	
	(ii) Sunburn (for 1-3 sq.cm of surface area)	2.0	3.0	Above 3.0	
	(iii)Mechanical injury	2.0	3.0	Above 3.0	
	(iv) Discolouration (Green /Green Top/ Blotchy) (for 1-4 sq.cm of surface area)	3.0	5.0	Above 5.0	
(ii)	Size (maximum diameter of the equatorial section)	Upto 65mm	Upto 55mm	Upto 45 mm	
(iii)	Range Acceptance	95%	90%	85%	
B.	Optional (Industrial/Processor)				
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40	

# 5. Sampling.

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 500 g shall be drawn from primary sample called as Laboratory sample

Common name: □□□

English name :Shelling peas

Botanical name: Pisum sativum (L)

Varieties name: Arkel, Jawahar Matar-

4,Bonneville,P-8,Lincoln,Jawahar Matar-1,VL-

3,Pant Uphar etc.



# 1. The Peas pods shall be -

- i. intact, clean and sound, turgid, fresh in appearance
- ii. free from black/brown spots on pods, visible insect damage, rotten tips,
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot..... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

SI.No.	Tradable Parameters	Range-1	Range-2	Range-3		
Α.		Essential				
(i)	Defects (Max) (i) Under developed (% by count)	3.0	5.0	Above 5.0		
	(ii) Black/ brown spots	1 sq cm of total surface area	1-2 sq cm of total surface area	2-3 sq cm of total surface area		
	(iii) Dry skin	Covering10% surface area	Covering 20% surface area	Covering above 20% surface area		
(ii)	Size (Length in mm) (maximum diameter of the equatorial section)	Upto 65mm	Upto 55mm	Upto 45 mm		
(iii)	Range Acceptance	95%	90%	85%		
B.	Optional (Industrial/Processor)					
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

# 5. Sampling.

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample

### 52. BOTTLE GOURD

Common name: □□□□

English name: Bottle Gourd Botanical name: *Lagenaria* 

siceraria

Varieties name: PKM1,CO.1, Pusa Navven, Arka Bahar,

Summerprolific Round, Summer prolific long, Pusa Manjiri, Pusa

Meghdoot, Samrat etc.

# 1. Bottle gourd shall be-

- i. intact, firm, clean, of reasonably uniform size, & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
Α.	Essential					
(i)	Weight (min.)	Upto 750 gms	500- 350 gms	Below 349 gms		
(ii)	Defects % by count (Max):- (i) shape/color & stains (1-4 sq cm of the surface area)	5%	10%	15%		
	(ii) rubbing and handling (1-4 sq cm of the surface area)	5%	10%	15%		
(iii)	Range Acceptance	95 %	90 %	85 %		
B.	Optional (Industrial/Processor)					
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample



### 53. BITTER GOURD

Common name:

English name: Bitter Gourd

Botanical name: Momordica charantia

Varieties name:Co 1, MDU 1, COBgoH 1 (Hybrid), Arka

Harit, Priya and Preethi etc



## 1. Bitter gourds shall be-

- i. intact, firm, clean, of reasonably uniform size, & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Length( mm)	Above 150 to 200	Above 100 mm to 150	60 to 100	
(ii)	Defects % by count (Max):- Skin, Color defects (scratches, scars, scraps and blemishes slight yellow color) (1- 4 sq cm of surface area)	3%	5%	7%	
(iii)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.

#### 54. CUCUMBER

Common name:

English name: Cucumber Botanical name: Cucumis

sativus

Varieties name: Amira, Lemon, Greensleeves, Armenian,

Saladbush, Pickle bush etc.



### 1. Cucumber shall be-

- i. intact, firm, clean, of reasonably uniform size, & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Essential				
(i)	Defects % by count (Max):-  (i) color &	3%	5%	7%		
	stains					
	(ii) Skin defects (Bruising/scratches/ cut) (1-4 sq cm of total surface area)	3%	5%	7%		
(ii)	Range Acceptance	95 %	90 %	85 %		
B.	Optional (Industrial/Processor)					
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

#### 55. BRINJAL

Common name: □□□□

English name: Brinial

Botanical name: Solanum melongena

Varieties name: Pusa Purple Long, Pusa Purple Cluster, Pusa Kranti, Pusa Barsati, Manjri Gota, Vaishali, Arka Navneet,

Arka

Sheel, Arka Kusmukar, Arka Nidhi (BWR - 12), Arka Keshav (BWR - 21), Arka Neelkanth (BWR - 54), Pusa Ankur, Eggplant- clound nine, Hari, Andaj, Bijli, Bharta

### 1. Brinjal shall be -

- iii. intact, firm, clean, of reasonably uniform size, & shape, color characteristics to the variety
  - free from visible foreign matter, abnormal external moisture, foreign smell
  - Variety.....(to be filled by assayer)
  - Actual Picture of the lot ...... ( to be uploaded by assayer)

# 2. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential Essential				
(i)	Defects % by count (Max):- (i) Bruising/ Scars/ Scratches (1-3 sq cm of total surface area)	3%	5%	7%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	Option	al (Industrial/Pr	ocessor)		
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

# 3. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 15 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 15 nos. shall be drawn from primary sample called as Laboratory sample



### 56. CABBAGE

Common name:

English name: Cabbage

Botanical name: Brassica oleracea var. capitata

Varieties name: Golden Acre, Pride of India, Copenhagen Market, Pusa Mukta, Pusa Synthetic, Midseason Market, September

Early, Pusa Drumhead, Early Drum Head, Late Large Drum Head, K-1



## 1. Cabbage shall be-

- i. fresh, firm, clean, well trimmed, of reasonably uniform size, variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- 2 Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot.....( to be uploaded by assayer)

## 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	<u>.</u>	Essential		
(i)	Defects % by count (Max):-  (i) Burst Head	3%	5%	7%
	(ii) Mechanical/Physi cal Injury	3%	5%	7%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Opt	ional (Industrial/Pro	cessor)	
(iii)	Weight	Not le	ess than 200 gms	3
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

### 57. CAULIFLOWER

English name: Cauliflower/ BROCCOLI

Botanical name: Brassica oleracea var. botrytis/L. var. italic

Varieties name: Pusa Deepali, Early Kunwari, Punjab Giant-26,

Punjab Giant-35, Pant Shubhra, Pusa Snowball-1, Sonwball-16, Pusa Early Synthetic, Pant Gobhi-2, Pant Gobhi-3, Dania Kalimpong, KTS-I, Solan Green, Lucky, Fiesta, Pushpa, Aishwarya, Palam Vichitra etc.

### 1. Cauliflower shall be-

- i. fresh, firm, clean, well trimmed, of reasonably uniform size , & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
<b>A</b> .	Essential				
(i)	Defects % by count (Max):- (i) Bruising (1-3 sq cm of total surface area)	3 %	5 %	7 %	
	(ii) Colour (1-5 sq cm of tota surface area)	3 %	5 %	7 %	
	(iii) Wooliness (1-10 sq cm of tota surface area)	3%	5%	7%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	O	otional (Indust	rial/Processor)		
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

### **58. GREEN CHILLIES**

English name: Green Chilly

Botanical name: Capsicum annum L

Varieties name: Agnirekha, Volcano, Tapan, Savitri,

Bela, NS991, Balwant, Green wonder, CCS-1, G-4, Kiran and

Jwala etc.



### 1. Green Chillies shall be

- i. fresh, firm, clean, of color characteristics to the variety
- ii. Free from visible foreign matter, abnormal external moisture, foreign smell, holes ,rotten, insect infestation
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essentia	al	
(i)	Defects % by count (Max):- (i) Bruising (5-10 mm of total surface area)	3%	5%	7%
	(ii) Colour (Including sun spots) (05-10 mm of total surface area)	3%	5%	7%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optional (Industrial/Processor)			
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling: -

- (i) 5% or minimum one container shall be randomly selected for sampling
- (ii) 100g shall be drawn from each selected container and shall be mixed homogenously ,called as primary sample
- (iii) 100g. shall be drawn from primary sample called as Laboratory sample

### 59. CARROT

Common name:

English name: Carrot

Botanical name: <u>Daucus carota</u> subsp. Sativus

Varieties name: Pusa Kesar, Pusa Meghali, Selection 223, No. 29, Nantes Half Long, Early Nantes, Chantenay, Imperator, Zeno,

PusaYamdagini etc.



- i. fresh, firm, clean, of color characteristics to the variety
- ii. free from root splitting, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.	Tradable Parameters	Range-1	Range-2	Range-3		
No.						
A.	Essential					
(i)	Size (mm)	150 to 200	Above 200 to 275	Below 150 & above 275		
(ii)	Defects % by count (Max):- (i) Bruising/ Scars/ Scratches (1-10 sq cm of total surface area)	5%	10%	15%		
	(ii) discoloration (1-4 sq cm of total surface area)	5%	10%	15%		
	(iii) Cracks/Fissures	3%	5%	7%		
(iii)	Range Acceptance	95 %	90 %	85 %		
B.		Optional (Indus	trial/Processor)			
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 15 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 15 nos. shall be drawn from primary sample called as Laboratory sample



### **60. SWEET POTATO**

English name: Sweet Potato

Botanical name: Ipomoea batatas

Varieties name: Co 3, Co CIP 1, Sree Nandini, Sree Vardhini, Kiran, Sree Bhadra, Sree Rethna, Gouri and Sankar. Certain local cultivars like SP local, SP 4, SP 13,

SP18 and Musiri Thandel



# 1. Sweet potatoes shall be -

- i. fresh, firm of color characteristics to the variety
- ii. free from black rot, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects % by count (Max):-			
	(i) Discoloration (1-4 sq cm of total surface area)	3%	5%	7%
	(ii) Skin defects (Bruising/scratches/cut) (1-4 sq cm of total surface area)	3%	5%	7%
(ii)	Range Acceptance	95 %	90 %	85 %
В	Optional (Industrial/Processor)			
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 05 nos. shall be drawn from primary sample called as Laboratory sample

### 61. SPINACH

Common name: 

□□□□□

English name: Spinach

Botanical name: Spinacia oleracea



# 1. Spinach shall be -

- i. intact, firm, clean, properly drained if washed and
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects % by weight (Max):- (i) Discolouration	3%	5%	7%
	(ii) Leaf Stem	Spinach Leaf stem must not exceed 5 cm in length	Spinach Leaf stem must not exceed 7 cm in length	Spinach Leaf stem must not exceed 10 cm in length
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Ор	tional (Industrial/	Processor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 500 g shall be drawn from primary sample called as Laboratory sample

### **62. MUSTARD LEAF**

Common name: □□□□□
□□□ English name: Mustard

Leaf Botanical

name: Brassica nigra



### 1. Mustard Leaf shall be -

- i. intact, firm, clean, properly drained if washed and
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Defects % by weight (Max):-  (i) Discolouration	3%	5%	7%
	(ii) Leaf Stem	Mustard Leaf stem must not exceed 5 cm in length	Mustard Leaf stem must not exceed 7 cm in length	Mustard Leaf stem must not exceed 10 cm in length
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optio	onal (Industrial/Pro	cessor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 500 g shall be drawn from primary sample called as Laboratory sample

#### 63. CORIANDER LEAVES

Common name:

English name: Coriander leaves Botanical name: Coriandrum

sativum

Varieties name: CO-1, CO-2, CO-3, CS-2, CS-287, Karan



## 1. Coriander Leaves shall be -

- i. intact, firm, clean, properly drained if washed and
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Essential			
(i)	Defects % by weight (Max):- (i) Discolouration	3%	5%	7%	
	(ii) Split leaves	3%	5%	7%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(iii)	Color (%)	More than 70	Between 40-70	Less than 40	
	(Characteristic true to the variety) Scale (1 to 100*) /Visual				
	(*100% is true to variety colour)				

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample

Common name:

English name: Garlic

Botanical name: Allium sativum

Varieties name: Bhima Omkar, Bhima Purple, Agrifound White (G-41)

Yamuna Safed(G-1), Yamuna Safed-2 (G-50), Yamuna Safed-3

(G-282), Yamuna Safed-4 (G-323) Yamuna Safed-5 (G-189), Godavari, Shweta, Phule Baswant, GG 4, Ooty 1, VL Garlic 1, VL Lahsun 2, Agrifound Parvati, Agrifound Parvati-2 (G-408)

### 1. Garlic bulbs shall be-

- i. intact, firm, clean, of reasonably uniform size & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell and Garlic may be Fresh or Semidry or Dry.
- 2. Variety..... (to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Defects % by count (Max):- (i) Irregular shape	3%	5%	7%
	(ii) Slight tears in outer skin	2%	4%	6%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Option	al (Industrial/Pro	cessor)	
(iii)	Garlic Bulb diameter (i) with cloves		Not less than	25 mm
	(ii) single clove		Not less than	15 mm

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample



### 65. Bhindi/Okra

Common name: □□□□

English name: Lady Finger

Botanical name: Abelmoschus esculentus

Varieties name: Pusa Makhmali, Punjab no. 13, Punjab Padmini, Pusa Sawani, Parbhani Kranti, Arka Anamika etc.



# 1. Lady finger shall be-

- i. whole with peduncle and intact tip, firm, fresh, clean, of color characteristics to the variety
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Essential					
(i)	Size (mm)	30 to 110	Above 110 to 135	Below 30 & above 135			
(ii)	Defects % by count (Max):- (i) scars, blemishes, scratches, bruises, scraps (1-4 sq cm of total surface area)	3%	5%	7%			
	(ii) Broken/without stalk	2%	4%	6%			
	(iii) Hardness	10%	15%	20%			
(iii)	Range Acceptance	95 %	90 %	85 %			
B.	Optional (Industrial/Processor)						
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40			

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample

### 66. GINGER

Common name: 

□□□□

English name: Ginger

Botanical name: Zingiber officinale

Varieties name: Maran, Assam, Himachal, Kuruppampadi, Wynad Local, Suprabha, Suruchi, Suravi, Himgiri, Varada,

Mahima, Rejatha etc.



### 1. Ginger shall be-

- i. Wholesome, firm, fresh, clean, same variety and
- ii. Free from visible foreign matter, abnormal external moisture, foreign smell
- 2. Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essentia	al	
(i)	Defects % by weight (Max):-			
	Skin defects (Bruising/scratc hes/cut) (1-3 sq cmoftotal surface area)	3%	5 %	7%
(ii)	Range Acceptance	95 %	90 %	85 %
	Ор	tional (Industria	I/Processor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40
(iv)	Wéight	N	ot less than 20 grm	is

### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample

#### 67. BEETROOT

Common name:

English name: Beetroot

Botanical name: Beta vulgaris

Varieties name: Detroit Dark Red, Crimson Globe



### 1. Beet root shall be:

- i. Fresh, firm deep bright red-purple flesh, clean, of reasonably uniform size, same variety and
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- 2 Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Defects % by count (Max):- (i) Discolouration (1-4 sq cm of total surface area)	2%	4%	6%
	(ii) Skin defects (Bruising/scratches/c ut) (1-4 sq cm of total surface area)	3%	5%	7%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optional (Industrial/ Processor)			
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 500 gms shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 500 gms shall be drawn from primary sample called as Laboratory sample

### **68. RIBBED CELERY**

Common Name:

English name: Ribbed Celery

Botanical name: Apium graveolens



# 1. Ribbed celery shall be:

- i. intact, firm, clean, properly drained if washed and
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- 2 Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
Α.		Essential		
(i)	Defects % by weight (Max):- (i) Discolouration (ii) Crushed & Split leaves	3% 2%	5% 4%	7% 6%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optional (Industrial/ Processor)			
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample

#### 69. CLUSTER BEANS

Common name:  $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$   $\square$  / Kothavarangai (Tamil)/Kothamara (Malayam)/Chikkudu (Telugu)/ Valore

KeDane (Gujarati)

English name: Cluster Beans

Botanical name: Cyamopsis tetragonoloba

Varieties name: Durgajay, Agaita Guara-112, etc



### 1. Cluster Beans shall be-

- i. intact, firm, clean, properly drained if washed and
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- 2. Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot..... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Defects % by weight (Max):- (i) Discolouration	3%	5%	7%
	(ii) Crushed & Split	2%	4%	6%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optiona	al (Industrial/Pi	rocessor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 200 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample.

#### 70. RIDGE GOURD

Common name: □□□□/ Peerkangai (Tamil)/Peechinga

(Malayalam)/ Beerakaya (Telugu)/□□□, □□ (Marathi)

English name: Ridge Gourd

Botanical name: Luffa acutangula



# 1. Ridge Gourd shall be-

- i. Wholesome, firm, fresh, clean, of reasonably uniform size, of same variety and
- ii. Free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects % by count (Max):-  (i) Discoloration	3%	5%	10%
	(ii) Skin defects (Bruising/scrat ches/cut) (1-7 sq cm of total surface area)		5%	10%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optional (Industrial/Processor)			
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour	More than 70	Between 40- 70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

### 71. RADISH

Common name: 

| | | | | | / Mullangi (Tamil, Malayalam

and Telugu)

English name: Radish

Botanical name: Raphanus sativus

Variety Name: Pusa Des, Pusa Chetki, Pusa

Reshmi, Nadauni etc

### 1. Radish shall be-

- i. Wholesome, firm, fresh, clean, of reasonably uniform size, of same variety and
- ii. Free from visible foreign matter, abnormal external moisture, foreign smell
- 2 Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essentia		
(i)	Size (mm)	Upto 350	Upto 250	Upto 150
(ii)	Defects % by count (Max):-  (i) Mechanical injury	2%	5%	10%
	(ii) Skin defects (Bruising/scrat ches/cut) (1-10 sq cm of total surface area)	2%	5%	7%
(iii)	Range Acceptance	95 %	90 %	85 %
B.	Op	tional (Industria	l/Processor)	1
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

### 72. Sweet Corn

Common name: 

Makkacholam (Tamil)/

 $\square\,\square\,\square/$ 

Madhura cholam (Malyalam) / Theepi Mokkajonna (Telugu)

English name: Sweet Corn Botanical name: Zea mays



## 1. Sweet Corn shall be-

- i. Wholesome, firm, fresh, clean, of reasonably uniform size, of same variety and
- ii. Free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Essential				
(i)	Size (mm)	Upto 250	Upto 200	Upto 150		
(ii)	Defects % by count (Max):- (i) Broken	2%	4%	6%		
(iii)	Range Acceptance	95 %	90 %	85 %		
B.	Optional (Industrial/Processor)					
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40		

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

# 73. Capsicum (Green)

mulaga (Malyalam)/ Vanta Mirapakaya (Telugu)

English name: Capsicum/ Bell-Pepper/Green pepper Botanical name: *Capsicum annuum* 



# 1. Capsicum shall be -

- i. Wholesome, firm, fresh, clean, of same variety and
- ii. Free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Essential			
(i)	Defects % by count (Max):- (i) Discoloration	2%	4%	6%	
	(ii) Skin defects due to rubbing (Bruising/scratches) (1-4 sq cm of total surface area)	5%	7%	10%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

# 74. Jimikand (Suran)

Chaena (Malyalam)/ Kandha (Telugu)

English name: Elephant foot yam

Botanical name: Amorphophallus paeoniifolius



## 1. Jimikand shall be -

- i. Wholesome, firm, fresh, clean, of same variety and
- ii. Free from, visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Defects % by count (Max):- (i) Irregular Shape maturity & development	2%	4%	6%		
	(ii) Skin defects (Cracks/Cuts/Scratches)	3%	5%	10%		
(ii)	Range Acceptance	95 %	90 %	85 %		

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 3 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 3 nos. shall be drawn from primary sample called as Laboratory sample

75. CUMIN

Common name :  $\Box \Box \Box \Box$ 

English name : Cumin

Botanical name: Cuminum cyminum (L)

# 1. Cumin shall be-

i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;

- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation :

S.No	Tradable Parameters	Range-1	Range-2	Range-3			
A.	Essential						
(i)	Moisture (% by wt) Max	9.0	10.0	10.0			
(ii)	Foreign matter (% by wt) Max	2.0	3.0	5.0			
(iii)	Broken/Damaged /discoloured (% by wt) Max	3.0	4.0	5.0			
B.	Optional	Optional (Industrial/Processor)					
(iv)	Non volatile ether extract % (m/m)	Not less than 8.0					
(v)	Volatile oil % (ml/100 gm) (min.)		Not less than	1.0			

# 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 100gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample

# 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animalfilth etc.
- (i) Damaged and discoloured seeds are sprouted or internally damaged as a result ofheat, microbe, moisture or weather and mechanical injury.
- (i) Broken seeds are pieces of sound kernels that are less than three fourths of thesize of full seeds.

Common name: □□□

English name : Red

Chillies

Botanical name: Capsium annum (L)

## 1. Red Chillies shall be-

clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;

free from obnoxious smell and fungus infestation. ii.

- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essentia			
(i)	Moisture (% by wt) Max	9.0	10.0	11.0
(ii)	Foreign matter (% by wt) Max	1.0	1.5	2.0
(iii)	Broken/Damaged/Discoloured (% by wt) Max	4.0	5.0	6.0
B.	Optional (Industrial/Processor)			
(iv)	Capsaicinoids content % (m/m)	No	ot less than	0.3

# 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged and discoloured are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iii) Broken fruits are pieces of sound fruits that are less than three fourths of the size of full kernels.



### 77. TURMERIC

Common name : \( \subseteq \subseteq \subsete \)

English name : Turmeric

Botanical name: Curcuma longa L

#### 1. Turmeric shall be-

i. clean, dried, wholesome, having characteristic odour and flavor, reasonably uniform in size, shape and colour characteristic to the variety;

- ii. free from obnoxious smell and fungus infestation,
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Ess	Essential				
(i)	Moisture (% by wt) Max	10.0	11.0	12.0		
(ii)	Foreign matter (% by wt) Max	1.0	1.5	2.0		
(iii)	Defective Rhizomes (% by wt) Max	5.0	7.0	10.0		
(iv)	Damaged matter (% by wt) Max	1.0	2.0	3.0		
B.	Optional (Industrial/Processor)					
(v)	Curcuminoid content % (m/m)		Not less t	than 2.0		

## 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

### 6. Definitions:

- (i) Defective rhizomes" means Shriveled fingers and or bulbs, internally damaged, hollow or porous rhizomes, rhizomes scorched by boiling and other types of damaged rhizomes.
- (ii) Foreign matter includes dust, dirt, stones, lumps of earth, chaff, stems or straw, food grains including oil seeds of any other verity or any other impurity.
- (iii) Damaged fruits are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanically injured fingers or bulbs.

#### 78. AJWAIN

Common name :

English name: Bishops Seed

Botanical name: Trachyspermum ammi.L Sprague



## 1. Ajwain seeds shall be :-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2. Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essent	ial		
(i)	Moisture (% by wt) Max	10.0	11.0	11.0
(ii)	Foreign matter (% by wt) Max	1.5	2.0	3.0
(iii)	Weevilled/Damaged/discoloured seeds (% by wt) Max	1.5	2.0	3.0
B.	Optional (Industrial/Processor)			
(iv)	Volatile oil % (ml/100 gm)		Not less the	nan 1.5

# 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 100gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged/Discoloured seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iii) Weevilled seeds are partially or wholly bored by insects injurious to seed but do not include germ eaten seeds and egg spotted seeds.

### CORIANDER WHOLE

Common name:

English name: Coriander whole

Botanical name: Coriandrum sativum



## 1. Coriander( Whole) shall be :-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2 Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Visible Color	Green	Light Brown	Brown	
(ii)	Moisture (% by weight) Max	8.0	9.0	11.0	
(iii)	Foreign matter (% by weight) Max	1.0	2.0	3.0	
(iv)	Damaged /Coriander Split seeds (% by weight) Max	8.0	12.0	15.0	
B.	Optional (Indu	Optional (Industrial/Processor)			
(v)	Total Ash % (m/m)	Not more than 7.0			
(vi)	Acid insoluble ash % (m/m)	Not more than 1.5			
(vii)	Volatile oil % (ml/100 gm)		Not less th	an 0.1	

# 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

# 6. **Definitions**:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (i) Damaged/Discoloured seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- Coriander Split is pieces of seeds that are one fourth or less than the full size of the whole seed.

# **80. DRIED RAW MANGO SLICES**

Common name: / Mangavathal (Tamil)/Unakka Mango

pool (Malyalam)/ Endina Mamidi mukkalu (Telegu) English name: Dried Raw Mango SlicesBotanical

name: Mangifera indica



# 1. Dried Mango Slices shall be-

- i. intact, firm, clean, of same variety and
- ii. free from visible foreign matter, abnormal external moisture, foreign smell,
- **2.** Variety ...... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
Α.		Esse	ntial			
(i)	Colour	Natural White	White to Brown	Brown to Black		
(ii)	Moisture (% by Weight) Max	12.0	12.0	12.0		
(iii)	Damaged & discoloured Slices (% by Weight) Max	2.0	4.0	5.0		
(iv)	Extraneous substance (% by Weight) Max	1.0	2.0	4.0		
B.	Optional (Industrial/Processor)					
(v)	Seed Coatings (% by Weight) Max	1.0	3.0	6.0		

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously will be called as primary sample
- (iii) 100 g shall be drawn from primary sample will be called as Laboratory sample

# 6. Definitions:

- (i) Damaged & discoloured slices mean the slices that are eaten by weevils or other insects and includes slices internally damaged by fungus, moisture or heating
- (ii) Seed coatings are exterior covering of the seed.

### 81. GUAR SEED

Common name :

English name : Guar

Seed

Botanical name: Cyamopsis tetragonoloba



#### 1. Guar seed shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2. Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Esse	ntial			
(i)	Moisture (% by wt) Max	10.0	11.0	12.0	
(ii)	Foreign matter (% by weight) Max	3.0	4.0	5.0	
(iii)	Admixture/discolored (% by weight) Max	10.0	15.0	20.0	
B.	Optional (Indus	Optional (Industrial/Processor)			
(iv)	Protein percentage by weight	Not more than 9 %			
(v)	Gum percent by weight	No	ot less than	67	

## 2. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

### 3. **Definitions**:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged seeds are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iii) Admixture means the presence of a variety of the same seed other than the variety in consideration.

### 82. MAHUA FLOWER

Common name :

English name : Mahua Flower

Botanical name: Madhuca longifolia

### 1. Mahua flower shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essei	ntial		
(i)	Moisture content (% by wt) Max	3.0	5.0	7.0
(ii)	Foreign matter (% by wt) Max	12.0	14.0	16.0
B.	Optional (Indus	strial/Proces	sor)	
(iii)	Total reducing sugar plus sucrose per cent (Min)	60	50	40
(iv)	Crude fibre per cent by mass on dry basis (Max.)	3	4	5
(v)	Acid insoluble ash per cent by mass on dry basis (Max.)	0.5	1.0	1.5

# 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

# 6. Definitions:

(i) Foreign matter includes sand, stones, pebbles, lumps of earth, clay, mudand vegetable matter of plant other than Mahua flower.

#### 83. TAMARIND

Common name:

English name : Tamarind

Botanical name: Tamarindus indica (L)



## 1. Tamarind shall be-

- clean, wholesome, reasonably in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2 Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	E	Essential	•	
(i)	Foreign matter (% by wt) Max	1.0	3.0	5.0
(ii)	Moisture content (% by wt) Max	18.0	20.0	25.0
(iii)	Damaged Pods (% by wt) Max	3.0	5.0	8.0
B.	Optional (li	ndustrial/Pro	ocessor)	
(iv)	Total Ash, per cent By mass on dry basis	4.0	5.0	6.0
(v)	Crude fibre, per cent by mass on dry basis	7.0	8.0	9.0

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

### 6. Definitions:

- (i) Foreign matter includes sand, stones, and pebbles, lumps of earth, clay, mud and vegetable matter of plant other than tamarind.
- (ii) Damaged pods means insect damaged pods and those which are devoid of pulp.

Common name: □□□

English name: Jaggery



# 1. Jaggery shall be-

- i. of clean, firm consistency, non sticky, reasonable size & shape(Lumps/Bheli/Chaku/Luddoo/Balti/Solid Cake/Cubes/bricks etc.), colour characteristic to the variety,
- *ii.* free from abnormal flavours, obnoxious smell, fungus infestation, fermentation and dirt.
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot...... (to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Essenti	al		
(i)	Colour	Light Golden/Golden /Yellow White	Dark Golden/Yellow Golden	Light Brown/Brown/ Dark Reddish	
(ii)	Moisture content (% by wt) Max	8.0	12.0	16.0	
(iii)	Foreign matter (% by wt) Max	1.0	1.5	2.0	
(iv)	Broken Part (% by weight) Max	2.0	5.0	10.0	
B.		Optional (Industria	al/Processor)		
(i)	Total Sugar expressed as invert sugar % (m/m)	Not less than 90 percent and sucrose not less than 60 percent			
(ii)	Total ash %	Not more than 6 percent			
(iii)	Ash insoluble in HCl %	1	Not more than 0.5		

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 3 Nos or 250 gm whichever is applicable shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 3 Nos or 250 gm shall be drawn from primary sample called as Laboratory sample

### 6. Definitions:

(i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mudand animal filth etc.

#### **85. GROUNDNUT WITH PODS**

Common name:

English name : Groundnut

Botanical name: Arachis hypogaea (L)



### 1. Groundnut shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.N o	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Moisture (% by wt)	8.0	10.0	12.0		
(ii)	Foreign matter (% by wt)	1.0	2.0	3.0		
(iii)	Damaged pods (% by wt)	2.0	3.0	5.0		
(iv)	Pods of other varieties (% by wt)	3.0	5.0	7.0		
B.	Optional (Industrial/Processor)					
(v)	Shelling (% by wt.)	Not less than 62				

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mudand animal filth etc.
- (i) Pods of other varieties means pods other than the one which is under consideration;
- (i) Damaged pods are internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Shelling means the weight of kernels found in 100 grams of pods.

#### 86. COCONUT

Common name:  $\Box \Box \Box \Box \Box$  / Theengai (Tamil)/Thenga

(Malayalam)/ Kobbari (Telegu)
English name: Coconut

Botanical name: Cocos nucifera



# 1. Coconut (Copra/ dried kernal of coconut)shall be-

- i. intact, firm, clean, of same variety and
- i free from visible foreign matter, abnormal external moisture, foreign smell, mold, smoke, burn
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3	
Α.		Essentia	<u> </u> 		
(i)	Oil content (% by Weight) Min	60.0	58.0	55.0	
(ii)	Moisture (% by Weight) Max	7.0	7.0	7.0	
(iii)	Wrinkled kernels (% by Weight) Max	10.0	10.0	10.0	
B.	Optional (Industrial/Processor)				
(iv)	Size Diameter in (mm)	85	75	60	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

## 6. Definitions:

(i) Wrinkled kernels include balls that are shrunk out of normal shape or are notfully matured or developed or have a rubbery structure and uneven surface. Such kernels are often discoloured.

#### 87. REETHA

Common name: □□□□ /Soppuka, pasakka

(Malyalam/ Kumkudu(Telgu)

English name: Soapnut

Botanical name: Sapindus mucorossi



#### 1. Reetha nuts shall be -

- i. intact, firm, clean, of color characteristics to the variety and
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell,
- 2 Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot.....( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr. No.	Tradable parameters	Range-1	Range-2	Range-3
Α.		Essential		
(i)	Foreign matter (% by Weight) Max	0.5	1.0	2.0
(ii)	Immature & shriveled nuts(% by Weight) Max	2.0	3.0	5.0
(iii)	Damaged and discolored nuts (% by Weight) Max	2.0	3.0	5.0
(iv)	Moisture (% by Weight) Max	9.0	10.0	12.0
(v)	Pods of other variety (% by Weight) Max	4.0	6.0	8.0
B.	Optiona	l (Industrial/Pr	ocessor)	
(vi)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 200 g shall be drawn from each selected container and shall be mixed homogenously will be called as primary sample
- (iii) 200 g shall be drawn from primary sample will be called as Laboratory sample

#### 6. Definitions

- (i) Foreign matter:-Includes inorganic and organic matter. The inorganic matter shall include sand, gravel, dirt, pebbles, stones, glass and metallic pieces, lumps of earth, clay and mud. Organic matter shall include husk, chaff, straw, weed seeds and other inedible grains.
- (ii) Damaged and Discolored pods: -Kernels or pieces of kernels that are sprouted or internally damaged as a result of heat, moisture, weather or microbes; discoloured, or discolouration materially affecting the quality.
- (iii) Immature and shriveled pods: are those pods which are imperfectly developed and /or shrunken.
- (iv) Pods of other varieties: means the pods of other than the principal variety.

#### 88. Bamboo

Common name: | | | | | | | /Muungil (Tamil)/Mula

(Malyalam)/ Veduru (Telugu)/ Baa/Baash (Aasmi)

English name: Bamboo

Botanical name: Bambusa vulgaris as per the variety\*

## 1. Bamboo shall be -

- i. clean, dry, mature and of same variety;
- ii. cut after same year monsoon
- iii. free from excessive dryness, tattering, excessive moisture, damage caused by frost/pests/diseases.
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot.....( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2		
A.		Essential			
(i)	Girth at thin end	not less than 8 cm	not less than 06 cm		
(ii)	Standard Lengths (In meter)	1, 2, 2.15, 2.5, 3.10, 3.70, 4.60, 5.50, 6.40, 7.30, 8.20, 9.10, 10.0	0.9 - 1.5,1.5 to 2.14		
(iii)	Girth Class	12-15	09-12		
	(In cm) (Measured at	15-20 20-25	More than 12		
	fat end )	25-30			
		30-35			
		35-40			
		40-45			
		45-50			
		More than 50			
B.	Optional (Industrial/Processor)				
(iv)	Colour	Dull green to Dark Green, Yellow	Dull green to Green, Yellow		

- 7. **Sampling:** 5% or 5 No (whichever is less) of the Lot shall be randomly selected and that will be called as Laboratory Sample.
- 8. **Definitions:** Variety- that differs from others of the same general kind or of the group to which it belongs.



Common name:

English name : Cotton

Botanical name: Gossypium hirsutum (L)



### 1. Cotton Seed shall be-

- i. Wholesome, clean, dried; and
- ii. Free from insect & fungus infestation, mould growth, rodent hair and excreta.
- **2.** Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradab	le Parameters	Range-1	Range-2	Range-3		
A.			Essei	ntial			
(i)		Extra long		Above 32.5			
	Ctanla	Long staple	Above 27.5 to 32.5				
	Staple	Medium long		Above	25.0 to 27.5		
	length (in mm)	staple					
	(11111111)	Medium	20.5 to 25.0				
		staple					
		Short Staple	Below 20.5				
(ii)		Trash	3.0	5.0	7.0		
	(% b	y wt) Max					
(iii)		le Strength	Above 28.0	26.0 and above	24.0 and above		
	1.0	tex) (mm)					
(iv)	Mie	cronaire	2.8 to 3.0	Above 3.0 to 3.5	Above 3.5 to 4.0		
(v)		oisture		Not more	e than 10.0		
	(% b	y Weight)					
B.	Optional (Industrial/Processor)						
(i)	Percentag	e of Matured	Above 81.0	Above 75.0-81.0	Above 70.0-		
	fiber	s (mm)			75.0		

# 5. Sampling:-

- (i) The lint cotton of one variety having reasonably uniform characteristic offered for sale at one time shall constitute a lot.
- (ii) From each of the bale so selected the representative adequate material may be drawn.

## 6. Definitions:

- (i) Micronaire (MIC) is a measure of the air permeability of compressed cotton fibers. It is often used as an indication of fiber fineness and maturity.
- (ii) Trash: often referred to as non-lint, commonly comprises fragments of leaves, bark and grass, as well as particles of sand and dust.

#### 90. RAW CASHEWNUT

Common name: | | | | | ( | | | | | | ) /Mundhri (Tamil)/Kasuvandi (Malayalam)/ Jeedi Pappu

(Telegu)English name : Raw Cashewnut

Botanical name: Anacardium occidentale



**Actual Picture above for illustration** 

### 1. Raw Cashew nuts shall be -

- i. Intact, firm, clean, of same variety and
- ii. Free from, visible foreign matter, abnormal external moisture, foreign smell .
- **2.** Variety Name Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable parameters	Range-1	Range-2	Range-3
Α.		Essential		
(i)	Moisture			
	(% by Weight) Max	12.0	12.0	12.0
(ii)	Number of nuts per kg.			
	(% by Weight) Max	160	180	210
(iii)	Void nuts			
	(% by Weight) Max	1.0	2.0	3.0
(iv)	Immature nuts			
	(% by Weight) Max	2.0	3.0	5.0
(v)	Damaged and			
	discolored nuts	2.0	2.0	F 0
	(% by Weight) Max	2.0	3.0	5.0
B.	Option	al (Industrial/I	Processor)	
(vi)	Color (%)	More than 70	Between	Less than 40
	(Characteristic true to the		40-70	
	variety) Scale (1 to 100*) /Visual (*100% is true to variety			
	colour)			

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously will be called as primary sample
- (iii) 100 g shall be drawn from primary sample will be called as Laboratory sample

## 6. Definitions:

- (i) Extraneous matter: includes stones, dust, dirt, parts of dried fruits and leaf, etc.
- (ii) Void nuts: in which there are no kernels.
- (iii) Immature nuts: the nuts, the kernels of which are not properly developed and/or shriveled.
- (iv) Damaged and discolored nuts: the nuts containing discolored kernels, decayed, diseased and broken nuts or mechanical injury, materially affecting the quality.

Common names: \( \backslash \seta \) \( \backslash \bac

Chellu(Malayalam) English name: Moth

Botanical name: Vigna aconitifolia Jacq Marechal



## 1. Moth shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ......( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Essential				
(i)	Moisture (% by wt) Max	10.0	12.0	14.0		
(ii)	Foreign matter (% by wt) Max	0.1	0.60	1.0		
(iii)	Other edible grains (% by wt) Max	1.0	3.0	6.0		
(iv)	Damaged grains (% by wt) Max	1.0	3.0	5.0		
(v)	Weevilled Grains (% by count) Max	2.5	5.0	10.0		
(vi)	Admixture (% by wt) Max	1.0	2.0	3.0		
(vii)	Immature & Shriveled (% by wt) Max	1.0	2.0	3.0		
B.	Opt	Optional (Processor/ Industrial)				
(viii)	Added Color	Absent				
(ix)	Uric Acid		Not more than 100mg/kg			
(x)	Aflatoxin	Not	more than 30 mic	rogram/kg		

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250g shall be drawn from primary sample called as Laboratory sample.

#### Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Admixture means the presence of a variety of the same grain other than the variety in consideration.
- (vi) Immature & Shriveled grains means kernels or pieces of grains that are not fully developed.

## 92. LINSEED

Common Name: - \( \subseteq \subseteq \) / Avise Ginjalu (Telgu)/Tisi,Mosina (Bangla)/ Chananvithu (Malyalam)/\( \subseteq \subseteq \) (\( \subseteq \subseteq \subseteq \subseteq \)

English Name: - Linseed

Botanical name:-Linum usitatisimum Linn.



### 1. Linseed shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2 Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot.....( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Essential					
(i)	Oil Content (% by wt) Min	39.0	33.0	24.0			
(ii)	Moisture (% by wt) Max	7.0	8.0	9.0			
(iii)	Foreign matter (% by wt) Max	2.0	4.0	6.0			
(iv)	Other oil seed (% by wt) Max	1.0	2.0	3.0			
(v)	Damaged seed (% by wt) Max	2.0	4.0	8.0			
B.	Optional (Processor/ Industrial)						
(vi)	Immature, shriveled and dead seeds	1.0	3.0	6.0			

## 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250g shall be drawn from primary sample called as Laboratory sample.

# 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Seed means any edible seed (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Seed means grains that are sprouted or internally damaged as a result of heat, microbe, and moisture or weather and mechanical injured seed.

### 93. RAW JUTE

Common Name: -  $\Box$   $\Box$   $\Box$   $\Box$  / Janapa Nara

(Telgu),Pat (Bangla)/ Chanam (Malyalam)/

Botanical name: -Corchorus spp.



#### 1. Raw Jute shall be-

- i. Dried, of minimum reed length of 150 cm, or the effective reed length should not be less than 100 cm
- ii. free from HUNKA, mud and other foreign materials.
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

Tradable Parameter	Range-1	Range-2	Range-3	Range-4	Range-5
Strength (Marks)	Need strength to break the fiber and sharp audible sound at the time of breakage (Excellent 30)	Need less strength to break the fiber and sound will be available at the time of breakage (Good 23)	Need less strength to break the fiber and sound will be available at the time of breakage (Good 23)	Need less strength to break the fiber and feeble sound at the time of breakage (Average 13)	Easily break the fiber and no sound at the time of breakage (Poor 04)
Defects (Marks)	Free from major defects but 10% minor defects may be allowed (25)	90% free from major defects but 20% minor defects may be allowed(17)	80% free from major defects and 30% minor defects may be allowed(09)	80% free from major defects and 30% minor defects may be allowed(09)	70% free from major defects (05)
Root Content (Marks)	< 5% length wise (20)	> 5% - 8% length wise (15)	> 8% - 10% length wise (08)	> 8% - 10% length wise (08)	> 10% length wise (03)
Fineness (Marks)	Very Fine (15)	Very Fine (15)	Fine (10)	Coarse (05)	Coarse (05)
Colour (Marks)	Light creamy to reddish yellow with luster(10)	Light creamy to reddish yellow with luster(10)	Light creamy to reddish yellow with luster(10)	Reddish / brownish with some light grey (05)	Light grey to dark grey (03)
Total Score	Above 80	Above 60	Above 40	Above 20	Less than 20

## 5. Sampling:-

- (i) 5% or minimum one Bunch shall be randomly selected for sampling.
- (ii) 1 kg shall be drawn from each selected Bunch and shall be mixed homogenously, called as primary sample.
- (iii) 1 kg shall be drawn from primary sample called as Laboratory sample.

## 6. Note

- (i) Natural dust may be allowed in Range 3 to 5 with proportionate discount.
- (ii) Root content will include hard barky croppy ends.
- (iii) Scores on the table may be taken as guidance for determining the discount.
- (iv) HUNA: Defects caused by non-removal of dried up base and hard bark from the fibers

#### 94. SAFFRON



#### Linnaeus

### 1. Saffron shall be-

- i. clean, of dark red colour, pleasant aroma characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters		Range-1	Range-2	Range-3
A.		E	ssential		
(i)	Moisture (% by wt) Max		8.0	10.0	12.0
(ii)	Foreign matter (% by wt) Max		0.5	1.0	1.5
(iii)	Floral waste (% by wt) Max		7.0	8.0	10.0
B.	Optional (Processor/ Industrial)				
(iv)	Added color			Abser	nt
(v)	Total Ash on dry basis (% by (Max.)	y wt) 8			
(vi)	Ash Insoluble in dilute HCl or basis (% by wt) (Max.)	n dry		Not more	e than 1.5%
(vii)	Solubility in cold water on dry basis (% by wt)	/ wt.		Not less	s than 65%
(viii)	Crude fibre on dry basis (% by wt)			Not mo	ore than 6%
(ix)	Total Nitrogen on dry basis	basis Not more than 2 %		re than 2 %	
(x)	Coloring strength expressed direct reading of absorbance 440 nm of dry basis			Not less	s than 80 %

### 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 1 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 1 g shall be drawn from primary sample called as Laboratory sample.

#### Definitions

- (i) "Foreign matter":-It includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Floral Waste:- Yellow filaments that are unattached and separated pollens, stamens, parts of ovaries and other parts of flowers of *Crocus sativus Linnaeus*.

## 95. DRUMSTICK

(Bangla)/Muringakkaya (Malyalam), English Name:

- Drumstick

Botanical name:- Guilandina moringa L.



## 1. Drumstick shall be-

- i. clean, wholesome, of colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2. Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ..... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essenti	al	
(i)	Appearance(Size, Shape & Color)	Superior	Very Good	Good
(ii)	Defects Scars/cut/ Bruising (% by weight) Max	5	10	15
(iii)	Range Acceptance (%)	95	90	85

# 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 200g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 200g shall be drawn from primary sample called as Laboratory sample.

#### 96. RAISINS

Common Name: - UUUUUU / UUUUUU (UUUUU)/ Endu Draksha

(Telgu)/ Kismis (Bangla)/ Unakkamuntiri (Malyalam) English Name: -Raisins

Botanical name:- Vitis vinifera L



### 1. Raisins shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
Α.		Essential		
(i)	Moisture (% by wt) Max	13.0	14.0	15.0
(ii)	Damaged Raisins (% by wt) Max	1.0	1.5	2.0
(iii)	Pieces of stem/kg. (Max.)	Absent	2	4
B.	Opt	ional (Processor/ Ir	ndustrial)	
(iv)	Cap-Stem/500 gm. (Max)	40	50	Above 50
(v)	Immature raisin percent by weight (Max.)	2	4	6
(vi)	Sugared Raisins (Dried Grapes) percent by weight (Max.)	5	10	15

## 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 500g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500g shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) "Damaged Raisins" means Raisins that are internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (ii) Cap-stem Small woody stem exceeding 3 mm in length which attaches the grape to the branch of the bunch and whether or not attached to a raisin.

#### 97. MAHUA SEED

Common Name: - \( \bigcup \) \

- Mahua Seed

Botanical name:-Madhuca longifolia



#### 1. Mahua Seed shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2 Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ..... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Oil Content (% by wt) Min	40.0	38.0	35.0
(ii)	Moisture (% by wt) Max	7.0	8.0	9.0
(iii)	Foreign matter (% by wt) Max	2.0	4.0	6.0
(iv)	Broken & damaged seed (% by wt) Max	10.0	15.0	20.0
B.	Opt	ional (Processor/ Ir	ndustrial)	
(i)	Color	Reddish yellow	D	ark brown

## 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250g shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) "Foreign matter":-It includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) "Broken:- shall include those seeds which are less than three-fourth but more than one-fourth of a whole seed.
- (iii) "Damaged Seed" means grains that are damaged as a result of heat, microbe, moisture or weather and mechanical injury.

### 98. PINEAPPLE

Pandu (Telgu)/ Anaras (Bangla)/ Kaitachakka

(Malyalam) English Name: -Pineapple

Botanical name:-Ananas comosus

# 1. Pineapple shall be-

- i. clean, wholesome of colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety ...... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.	Ess	sential		
(i)	Weight in Kg (Min)	1.5	1.0	Less than 1.0
(ii)	Defects (%) Scars/cut/ Bruising	2.0	4.0	Above 4.0
(iii)	Range Acceptance (%)	90	85	80

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 Nos. shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 5 Nos. shall be drawn from primary sample called as Laboratory sample



# 99. TEZPATTA (BAY LEAVES)

Tezpatta(Bangla Tamalapatram (Malyalam),

English Name: - Bay leaves

Botanical name: Laurus

nobilis



- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Appearance	Superior	Very Good	Good	
(ii)	Defects (% by weight) (Max)	1.0	10.0	above 10.0	
(iii)	Range Acceptance (%)	95	90	85	
(iv)	Colour	Light green	Slight brown	Brown	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 50g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 50g shall be drawn from primary sample called as Laboratory sample.

# 6. Definitions:

(i) Damage means leaves that are internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.



## 100. TENDER COCONUT

Common name: □□□
□□□□□ English name:
Coconut Botanical name:
Cocos nucifera



## 1. Coconut shall be-

- i. intact, firm, clean, of same variety and
- ii. free from visible defects, foreign smell
- **2.** Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essentia	al	
(i)	Weight (kgs)	1.0 to 2.0	Below 1.0 and more than 2.0	Below 1.0 and more than 2.0
(ii)	Defects % by count (Max):-  Colour(paler/brown part of any region including bruises)	10%	15%	Above 15%
(iii)	Range Acceptance	95 %	90 %	85 %

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample.

## 101. FENUGREEK (WHOLE)

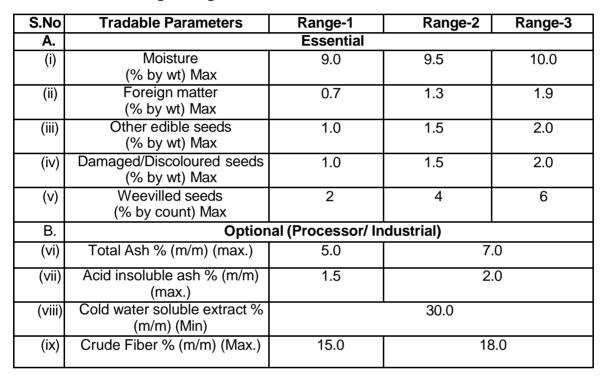
Common names:

English name: Fenugreek

Botanical name: Trigonella foenum-graecum

## 1. Fenugreek shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:



# 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100g shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains" means any edible grains (including oil seeds) other than the one which is under consideration:
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Discoloured seeds mean seeds or pieces of seeds that have changed colour as a result of deteriorative changes.
- (v) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.



# 102. FENUGREEK LEAVES (Methi)

English name: Fenugreek Leaves

Botanical name: Trigonella foenum-graecum



### 1. Methi shall be -

- i. intact, firm, clean, properly drained if washed and
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Rang-3
A.		Essential		
(i)	Defects % by weight (Max):- (i) Discolouration  (ii) Leaf Stem	3% Fenugreek Leaf stem must not exceed 2 cm in length	5%  Fenugreek Leaf stem must not exceed4 cm in length	7%  Fenugreek  Leaf stem  must not  exceed 6 cm  in length
(ii)	Range Acceptance	95 %	90 %	85 %

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 500 g shall be drawn from primary sample called as Laboratory sample

#### 103. FENNEL SEED

Common names: 

□□□□□□

English name: Fennel seed

Botanical name: Foeniculum vulgare Mill

# 1. Fennel seed shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- 2. Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Rang-3	
A.	Essential				
(i)	Moisture (% by wt) Max	10.0	11.0	12.0	
(ii)	Foreign matter (% by wt) Max	1.5	3.5	4.5	
(iii)	Other edible seeds (% by wt) Max	1.0	1.5	2.0	
(iv)	Damaged/Broken seeds (% by wt) Max	1.5	3.0	4.0	
(v)	Immature/ Shriveled/discoloured/ blackened seeds (% by count) Max	2.5	4.0	6.0	
B.	Optional Parameters (Industrial/Processor)				
(vi)	Volatile Oil % (ml/100gm)	2.0	1.5	1.0	
(vii)	Crude Fiber (% by weight)	11.0	13.0	15.0	

# 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100g shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains" means any edible grains (including oil seeds) other than the one which is under consideration:
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Discoloured seeds mean seeds or pieces of seeds that have changed colour as a result of deteriorative changes.
- (v) Immature grains means kernels or pieces of kernels that are not fully developed.

## 104. ISABGOL

Common names:

English name: Isabgol

Botanical name: Plantago ovate Forsk

# 1. Isabgol shall be-

- i. clean, white to off white in colour, odour less and have thin shaped structures, 2 to 3mm long and 0.5 to 1mm wide.
- ii. free from fungus infestation.
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Rang-3
A.		Essential		
(i)	Moisture (% by wt) Max	10.0	11.0	12.0
(ii)	Extraneous matter (% by wt) Max	1.0	1.5	2.0
B.	Optio	onal (Processor/ In	dustrial)	
(iii)	Total Ash(% by weight) on dry basis	2.0	2.5	3.0
(iv)	Acid insoluble Ash (% by weight ) on dry basis	0.1	0.2	0.3

## 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100g shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

(i) Extraneous matter includes husk, straws, weed seeds, other inediblegrains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.

### 105. Pointed GOURD

Common name:

English name: Pointed Gourd

Botanical name: Trichosanthes dioica

## 1. Pointed Gourd shall be-

i. Wholesome, tender, firm, fresh, clean and blemish free surface, of reasonably uniform size, of same variety and

- ii. Free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects % by count (Max):-  (i) Discoloration	5%	10%	15%
	(ii) Skin defects (Bruising/scrat ches/cut/blemi shes) (1-3 sq cm of total surface area)	5%	10%	15%
(ii)	Range Acceptance	95 %	90 %	85 %
B.		Optional (I	ndustrial/Proces	sor)
(iii)	Size as Diameter	25 to 45 mm		
(iv)	Color –Green (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 100g Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 200g shall be drawn from primary sample called as Laboratory sample

Common name: " | | |

English name: Pumpkin

Botanical name: Cucurbita pepo L.

# 1. Pumpkin shall be -

i. Wholesome, firm (thick core), reasonably uniform size & shape, fresh, clean, of same variety and

ii. Free from, visible foreign matter, abnormal external moisture, foreign smell

**2.** Variety ...... (to be filled by assayer)

**3.** Actual Picture of the lot...... ( to be uploaded by assayer)

4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3	
A.		Essent	Essential		
(i)	Weight / Piece ( Kg)		1- 20		
(ii)	Defects % by count (Max):-				
	Skin defects (cracks/cut/rotten spots) (1-9 sq cm of total surface area)	10%	15%	20%	
(iii)	Range Acceptance	90 %	85 %	80 %	
B.	0	ptional (Industrial/	Processor)		
(iv)	Color of flesh – Yellow (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample



## 107. Large Cardamom

Common name:

English name : Large Cardamom

Botanical name: Elettaria cardamomum (L)

# 1. Large Cardamom shall be-

- (i) Dried, clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- (ii) free from wild cardamom, obnoxious smell and fungus infestation.
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Moisture(% by wt) Max	Up to 11 %	up to 12 %	up to 13 %
(ii)	Foreign matter(% by wt) Max	1.0		5.0
(iii)	Immature, Shriveled & Insect damaged capsules (% by wt) Max	3.0		5.0
(iv)	Empty and malformed capsules (% by wt.)	5.0	8.0	
(v)	Mass in gm/L (Min)	350	300	
B.	Optional	(Industrial/Prod	essor)	
(vi)	Tail cut		Yes	
(vii)	Colour	Pink	Brown	Brown
(viii)	Acid insoluble ash % (m/m) (max.)	2.0		
(ix)	Total Ash % (m/m)(max.)	8.0		
(x)	Volatile oil % (ml/100 gm) (min.)		Not less than	0.5

#### 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 25gm (100 g in case of single container) shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Empty and Malformed capsules are capsules without seed or are scantily filled with seeds.
- (iii) Immature and shriveled and insect damaged capsules which are not fully developed or are damaged by insects,



## 108. Colocasia vegetable

Common name: □□□□

English name: Colocasia vegetable

Botanical name: Colocasia esculenta



# 1. Colocasia vegetable shall be -

- i. fresh, firm, of color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Defects % by count (Max):-				
	(i) Extraneous matter (% by weight) Max	5%	10%	12%	
	(ii) Skin defects (cracks/scratches/cut/branchi ng) (2-5sq cm of total surface area)	5%	10%	15%	
(ii)	Range Acceptance	95 %	90 %	85 %	
В	Opti	onal (Industrial/Processor)			
(iii)	Diameter	More than 25mm	15 to 25 mm	up to 15	
(iv)	Length	30-45			

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

## 7. Definitions:

(i) Extraneous matter includes husk, straws, weed seeds, sand, gravel, dirt, pebbles, lumps of earth, clay, mud and animal filth etc.

#### 109. Betel Leaves

Common name:

English name: Betal Leaves

Botanical name: Piper betel leaves.



## 1. Betal Leaves shall be -

- Mature& stalk intact, color characteristics true to variety, fresh, clean
- ii. Free from visible foreign matter, foreign smell and taste, pest, larvae and mites,
- **2.** Variety..... (to be filled by assayer)
- 3. Actual Picture of the lot..... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects % by weight (Max):- (iii) Cracks/holes/ tears/bruises	5%	10%	15%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	0	ptional (Industrial	/Processor)	
(iii)	Size	Length: upto 7cm Width: upto 4cm	Length: 7cm to 15cm Width: 4cm to 10cm	Length:15 cm above Width: 10 cm above
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 10 No. shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 10 No. shall be drawn from primary sample called as Laboratory sample

#### 110 PAPAYA

Common

name: 

English

name:Papaya

Botanical name: Carica papaya

# 1. Papaya shall be-

- i. intact, firm, clean, ripened to proper state, of reasonably uniform size & shape, color characteristics to the variety
- ii. free from visible foreign matter, abnormal external moisture, foreign smell.
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essentia	I	
(i)	Defects % by count (Max):- (Cuts/cracks/ bruises/black spot/soft patches) (1-3sq. cm. of total surface area)	5%	7%	10%
(ii)	Range Acceptance	95 %	90 %	85%
B.		Optional (Indust	rial/Processor)	
(iii)	Color(%):- Partly Green /Yellow (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	
(iv)	Weight in kg	0.5 to 2.0	M	ore than 2.0

## 5. Sampling: -

- (iv) 5 % or minimum one container shall be randomly selected for sampling
- (v) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (vi) 10 nos. shall be drawn from primary sample called as Laboratory sample

#### 111. IVY GOURD

Common name:

English name: Ivy/Scarlet Gourd

Botanical name: Coccinia grandis



# 1. Ivy Gourd shall be-

- i. Wholesome, tender, firm, fresh, clean and blemish free surface, of reasonably uniform size, of same variety and
- ii. Free from visible foreign matter, abnormal external moisture, foreign smell
- **2** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects % by count (Max):-  (i) Discoloration	5%	10%	15%
	(ii) Skin defects (Bruising/scratches/cut/ blemishes) (1-3 sq cm of total surface area)	5%	10%	15%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Opti	onal (Industria	I/Processor)	
(iii)	Color –Green (%) (Characteristic true to the variety) Scale (1 to 100*)  /Visual (*100% is true to variety colour	More than 70	Between 40-70	Less than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 15 nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 15 nos. shall be drawn from primary sample called as Laboratory sample

Common name: 

□
□

English name: Areca nut (Betel Nut)

Botanical name: Areca catechu

Varieties name: Moti special, Shrivardhan special,

Jamnagarspecial, Jeeni special. Meetupalayam special, pooja

special, koka special etc.



#### 1. Areca nut shall be-

- Whole fully husked, of light color, reasonably matured, reasonably uniform size & shape, color characteristics to the variety
- ii. Free from blemish, cracks, fissure, shrinkage
- iii. shall not be worm eaten and hollow inside.
- **2.** Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.	Tradable	Range-1	Range-2	Range-3	
No.	Parameters				
A.		Essenti	al		
(i)	Size (diameter of the equatorial section))	20-30 mm	15-19mm	Not less than 12 mm	
(ii)	Defects % by count (Max):- Skin defects (scratches scars, scrapes and blemishes)	10 %	15 %	20%	
(iii)	Range Acceptance	95 %	90 %	85%	
B.	Optional (Industrial/Processor)				
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40	

#### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 100gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample

#### 113 Tuberose

Common name:

English name: Tuberose

Botanical name: Polianthes tuberose Linn.

- 1. Tuberose shall be -
  - (i) not in dry condition, Clean free from any visible foreign matter, pest, insect cut and damage caused by them or diseases or mechanical damage due to handling, loading, unloading and transportation affecting the general appearance of the produce, reasonably uniform size & shape, color
  - (ii) free from artificial colouring
- 2. Variety .....(to be filled by assayer)
- 3. Actual Picture of the Lot.....
- 4. Criteria for Range designation:

Sr.No.	Tradable Parameters	Range-1	Range-2	Range-3
Α		Essential	•	
(i)	Color (characteristics to the variety)	Bright White	slight brighter white to milky white	Reasonable white to milky white
(ii)	Blooming and Shape	Perfect bloomed and conical shape More than 95 %	Slightly bloomed and conical shape More than 90 %	Reasonable bloomed and conical shape More than 85 %
(iii)	Range Acceptance	95 %	90 %	85%
В	Optional (Industrial/Processor)			
(iv)	Stem Length in cm	Above 45	30 to 45	Below 30

# 5. Sampling:

- (i) 5 % or minimum one bunch shall be randomly selected for sampling from each bunch.
- (ii) 5 Nos spikes shall be drawn from each selected bunch and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. spikes shall be drawn from primary sample called as Laboratory sample

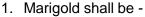
## 114 Marigold

Common name:

English name: Marigold

Botanical name: Tagetes erecta, Tagetes tenuifolia, Tagetes patula,

Tagetes minuta



- (i) Clean free from any visible foreign matter, pest, insect cut and damage caused by them or diseases or mechanical damage due to handling, loading, unloading and transportation affecting the general appearance of the produce, reasonably uniform size & shape, color
- (ii) free from artificial colouring
- 2. Variety .....(to be filled by assayer)
- 3. Actual Picture of the Lot.....
- 4. Criteria for Range designation:

Sr.No	Tradable Parameters	Range-1	Range-2	Range-3	
Α		Essential			
(i)	Color (characteristics to the variety)	Superior Bright Yellow to Golden yellow	slight brighter reddish with yellow sparkling	Reasonable brighter brown and white	
(ii)	Shape and Blooming	Perfect bloomed and round disc shape More than 95%	Slight bloomed and round disc shape More than 90%	Reasonable bloomed and round disc shape More than 85%	
(iii)	Range Acceptance	95 %	90 %	85%	
В	Optio	Optional (Industrial/Processor)			
(iv)	Moisture %	Upto 40%			

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample



#### 115. Buckwheat

Common name : Kuttu /

English name : Buckwheat

Botanical name: Fagopyrum esculentum

#### 1. Buckwheat shall be-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety,
- ii. free from obnoxious smell and fungus infestation,
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No	Tradable Parameters	Range-1	Range-2	Range-3
A.	P	rimary		
(i)	Moisture (% by wt) Max	12.0	13.0	14.0
(ii)	Foreign matter (% by wt) Max	1.5	3.0	4.0
(iii)	Admixture/Other edible grains (% by wt) Max	3.0	5.0	7.0
(iv)	Damaged/ immature & Shrivelled grains (% by wt) Max	3.0	5.0	7.0
(v)	Weevilled Grains (% by count) Max	3.0	5.0	7.0
B.	Optional (Industrial/ Processor)			
(vi)	Uric Acid Not more than 100mg/kg			mg/kg
(vii)	Aflatoxin	Not mo	re than 30 mic	rogram/kg

# 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

# 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 116. SNAKE GOURD

Common name:

English name: Snake Gourd

Botanical name: Trichosanthes cucumerina

## 1. Snake Gourd shall be-

- i. Wholesome, firm, fresh, clean, of reasonably uniform size, of same variety and
- ii. Free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety.....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Primary			
(i)	Length	300-750 MM 40-60 MM 3% 5%		All sizes not
	Diameter			conformin g to Range 1 & 2
	Skin defects Damage (Bruising/scratc hes/cut) (1-7 sq cm of total surface area)			10%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Option	nal (Industria	/Processor)	
(iii)	Color (%) Green with white strips (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Moi	re than 40

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

#### 117. STRAWBERRIES

Common name:

English name: Strawberries

Botanicalname: *Fragaria* × *ananassa* 

## 1. Strawberries shall be-

- i. intact, firm, clean, of reasonably uniform size, & shape, color characteristics to the variety
- ii. Reasonably free from visible foreign matter, abnormal external moisture, foreign smell ,Mould infestation
- iii. With calyx intactand short green un-withered stalk attached
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Primary	/		
(i)	<b>Size</b> (Diameter) mm	Above 25	Ab	ove 18	
(ii)	Traces of Soil	Absent	Sight traces		
(iii)	Defects by count (Max):- (i) White patches (up to 10% ofsurface area of fruit)	NIL	10%	20%	
	(i) Scratches & bruises (up to 10% of surface area of fruit)	3%	5%	7%	
(iv)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(v)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70		More than 40	

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

Common name:

English name: Indian Goosberry

Botanical name: **Phyllanthus emblica** 

### 1. Amla shall be-

i. clean, intact, firm, of reasonably uniform size, & shape, color characteristics to the variety

- free from visible foreign matter, abnormal external moisture, foreign smell ,mould infestation
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	<b>Size</b> (Diameter) mm	Above 35	Ab	ove 25	
(ii)	Defects by count (Max):- (iii) Skin defects- bruising, sunspots, latex burns (up to 4 sq cm of total surface)	3%	5%	7%	
(iii)	Range Acceptance	95 %	90 %	85 %	
B.	C	ptional (Industria	I/Processor)		
(iv)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70		More than 40	

# 5. Sampling: -

- (iv) 5 % or minimum one container shall be randomly selected for sampling
- (v) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (vi) 10 nos. shall be drawn from primary sample called as Laboratory sample

## 119. Horse gram

Common name:  $\square$ 

English name: Horse

gram

Botanical name: Macrotyloma uniflorum

## 1. Horse gram shall be:

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- **2.** Variety .....(to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

Sr.N o.	Tradable Parameters	Range-1	Range-2	Range-3
Α.		Primary		
(i)	Moisture (% by wt) Max	10.0	12.0	14.0
(ii)	Foreign matter (% by wt) Max	1.0	2.0	3.0
(iii)	Admixture/Other edible grains (% by wt) Max	2.0	3.0	4.0
(iv)	Damaged grains (% by wt) Max	4.0	5.0	7.0
(v)	Weevilled Grains (% by count) Max	3.0	6.0	10.0
(vi)	Immature & Shrivelled (% by wt) Max	1.0	2.0	3.0
B.	Optional	(Industrial/	Processor)	
(i)	Uric Acid	N	ot more than 100 r	mg/kg
(ii)	Aflatoxin	Not more than 30 microgram/kg		
(iii)	Total of foreign matter, other edible grains and damaged grains	Not more than 12 percent by weight		

### 5. Sampling:-

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration:
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses;
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 120. DRY GINGER

Common name:

English name: Dry Ginger

Botanical name: Zingiber officinale

# 1. Dry ginger shall be-

- (i) wholesome, firm, clean, same variety; and
- (ii) free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Primary				
(i)	Moisture (% by Weight) max		10.0			
(ii)	Extraneous matter % (max)	1.0 2.0				
(iii)	Insect Damaged % (max)	1.0				
(iv)	Range Acceptance	95 % 90 %		85 %		
В.		Optional (Indu	strial/Processor)			
(v)	Volatile Oil on dry basis		Not less than 1.5 %	6		
(vi)	Total ash on dry		8.0 ( unbleached)			
	basis	12 ( bleached)				
(vii)	Calcium as	1.1 (Unbleached)				
	Calcium oxide on dry basis % (max)		2.5 (Bleached)			

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 50 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample

## 121. Lobia Pods

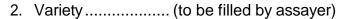
English name: Green long Cowpea Pods

Botanical name: Vigna sinensis

#### 1. Lobia Pods shall be-

i. intact, firm, clean, properly drained if washed and

ii. free from, visible foreign matter, abnormal external moisture, foreign smell



3. Actual Picture of the lot..... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
(i)	Defects % by weight (Max):- (i) Discolouration	3%	5%	7%
	(ii) Crushed & Split	2%	4%	6%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optiona	al (Industrial/P	rocessor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 200 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample.



#### **122. DOLICHOS BEAN**

Common	name:	

name: Dolichos bean, Hyacinth bean or Field bean

Botanical name: Lablab purpureus L. (Sweet)

## 1. Green Lobia Beans shall be-

- i. intact, firm, clean, properly drained if washed and
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell
- 2. Variety..... (to be filled by assayer)
- 3. Actual Picture of the lot..... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Essential		
(i)	Defects % by weight (Max):- (iii) Discolouration	3%	5%	7%
	(iv) Crushed & Split	2%	4%	6%
(ii)	Range Acceptance	95 %	90 %	85 %
B.	Optiona	 al (Industrial/Pi	rocessor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40- 70	Less than 40

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 200 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample.



#### 123. CARNATIONS

Common name:

English name: Carnation

Botanical name: Dianthus caryophyllus

- 1. Carnation shall be -
  - (i) not in dry condition, Clean free from any visible foreign matter, pest, insect cut and damage caused by them or diseases or mechanical damage due to handling, loading, unloading and transportation affecting the general appearance of the produce, reasonably uniform size & shape, color
  - (ii) free from artificial colouring
- 2. Variety .....(to be filled by assayer)
- 3. Actual Picture of the Lot.....
- 4. Criteria for Range designation:



Sr.No.	Tradable Parameters	Range-1	Range-2	Range-3
Α		Primary		
(i)	Blooming and Shape	Perfect bloomed and shaped More than 95 %	Slightly bloomed and in shape More than 90 %	Reasonable bloomed and in shape More than 85 %
(ii)	Minimum length (in cms)	60 cm to 38 cm		
В	Opt	tional (Industrial/Proce	essor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40
(iv)	Minimum Flower Diameter		6.9 cms to	5 cm

Note: Due to verietal differences and climatic conditions in the various growing areas, flower dimmensions may vary.

## 5. Sampling:

- (i) 5 % or minimum one bunch shall be randomly selected for sampling from each bunch.
- (ii) 5 Nos spikes shall be drawn from each selected bunch and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. spikes shall be drawn from primary sample called as Laboratory sample

#### 124. GLADIOLUS

Common name: \( \bigcup \quad \quad

- 1. Gladiolus shall be -
- (i) not in dry condition, Clean free from any visible foreign matter, pest, insect cut and damage caused by them or diseases or mechanical damage due to handling, loading, unloading and transportation affecting the general appearance of the produce, reasonably uniform size & shape, color
- (ii) free from artificial colouring
- 2. Variety .....(to be filled by assayer)
- 3. Actual Picture of the Lot.....
- 4. Criteria for Range designation:

Sr.No.	Tradable Parameters	Range-1	Range-2	Range-3
Α		Primary		
(i)	Blooming and Shape	Perfect bloomed and with stem More than 95 %	Slightly bloomed and with stem More than 90 %	Reasonable bloomed and with/without stem More than 85 %
(ii)	Minimum length (in cms)	11	15 cm to 80 cm	
В	Opt	tional (Industrial/Proce	essor)	
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40
(iv)	Minimum Flower Diameter		8.75 cms to 6	5.25 cm

Note: Due to verietal differences and climatic conditions in the various growing areas, flower dimmensions may vary.

# 5. Sampling:

- (i) 5 % or minimum one bunch shall be randomly selected for sampling from each bunch.
- (ii) 5 Nos spikes shall be drawn from each selected bunch and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. spikes shall be drawn from primary sample called as Laboratory sample

### 125. APRICOT

Common name:

□□□ /Khurmaani / Jardaalu (Kannada

Khubani/□□

English name: Apricot

Botanical name: P. armeniaca



# 6. Apricot shall be .-

- iv. Fresh, clean, mature, firm, of reasonably uniform size & shape, color characteristics to the variety, with/without stalk
- v. Reasonably free from visible foreign matter, abnormal external moisture, foreign smell, mould infestation and bore.
- 7. Variety..... (to be filled by assayer).
- 8. Actual Picture of the lot...... ( to be uploaded by assayer).
- 9. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary	/	
(vi)	Size in Diameter )mm(	Above 35	Belo	ow 35
(vii)	Defects by count:- Bruised marks / slight brusing/soft patches upto 1 sq. cm.	Upto10%	Upto 15%	Upto 20%
(viii)	Range Acceptance	95 %	90 %	85 %
B.		Optional (Industria	I/Processor)	
(ix)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70		More than 40

# 10. Sampling: -

- (vii) 5 % or minimum one container shall be randomly selected for sampling.
- (viii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (ix) 5 Nos. shall be drawn from primary sample called as Laboratory sample.

#### 126. ARHAR DAL SPLIT

Common name: ARHAR DAL SPLIT, \( \bigcup \bigc

English name : Red gram—split Botanical name: Cajanus

cajan

### 1. Arhar Dal whole shall be .-

- i. Clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety, with or without husk.
- ii. Free from any obnoxious smell and fungus infestation.
- **2.** Variety ..... (to be filled by assayer).
- **3.** Actual Picture of the Lot ...... ( to be uploaded by assayer) .

## 4. Criteria for Range designation:

Sr.No	Tradable Parameters	Range-1	Range-2	Range-3	
Α	Primary				
(i)	Moisture, (% by wt), Max.	11.0	12.0	14.0	
(ii)	Foreign matter, (% by wt) Max.	1.0	1.5	2.0	
(iii)	Other edible grains, (% by wt) Max.	1.0	2.0	3.0	
(iv)	Damaged grains, (% by wt) Max.	2.5	3.5	5.0	
(v)	Weevilled grains, (% by count) Max.	3.0	5.0	10.0	
(vi)	Admixture, (% by wt) Max.	1.0	2.0	3.0	
(vii)	Broken fragments, (% by wt) Max.	1.0	2.0	3.0	
В	Optional (Processor/ Industrial)				
(viii)	Uric Acid	Not more than 100mg/kg			
(ix)	Aflatoxin	Not mo	re than 30 microgra	am/kg	

#### 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter: includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains: means any edible grains (including oil seeds) other than the one which is under consideration.
- (iii) Damaged Grains: means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses.
- (iv) Weevilled grains: means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 127. SAFED PETHA

Common name: Safed petha/

English name: Ash gourd Botanical

name: Benincasa hispida

#### 1. Safed Petha shall be.-

- i. fresh, clean, wholesome, firm (thick core), reasonably uniform size & shape, of same variety.
- ii. free from, visible foreign matter, abnormal external moisture, foreign smell.
- **2.** Variety ..... (to be filled by assayer).
- **3.** Actual Picture of the lot.....( to be uploaded by assayer).
- 4. Criteria for Range designation:

S.No.	Tradable Parameter	Range-1	Range-2	Range-3
A.		Primary	1	
(i)	Weight / Piece ( Kg)	Upto 12	Upto 20	Above 20
(ii)	Defects % by count (Max):- Skin defects (cracks/cut/rotten spots) (1-9 sq cm of total surface area)	10%	15%	20%
(iii)	Range Acceptance	90 %	85 %	80 %
B.	Optional (Industrial/Processor)			
(iv)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70	Between 40- 70	Less than 40

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample.



Common name: Ber/□□□
English name: Indian jujube

Botanical name: Ziziphus mauritiana

#### 1. Ber shall be.-

i. firm, clean, of reasonably uniform size, & shape, color characteristics to the variety, with or without stalk.



- ii. free from, visible foreign matter, abnormal external moisture, foreign smell, mould infestation and bore.
- **2.** Variety ..... (to be filled by assayer) .
- 3. Actual Picture of the lot...... ( to be uploaded by assayer).

## 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
(i)	Size (mm) Length & Diameter	Upto 50	Upto 35	Below 35
(ii)	Defects % by count (Max):- Slight bruising/ soft patches ( upto 1 sq. cm of total surface	3%	5%	7%
(iii)	Range Acceptance	95 %	90 %	85%
В.	Option	nal (Industrial/F	Processor)	
(iv)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70	Between 40-70	Less than 40

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.

#### 129. BLACK PEPPER WHOLE

Common name: \( \Bigcup \Bigcu

Botanical name: Piper nigrum

# 1. Black Pepper-Whole shall be.-

- i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. free from obnoxious smell and fungus infestation.
- iii. free from artificial color, coating of mineral oil.
- **2.** Variety ...... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:

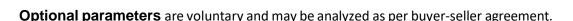
S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
(i)	Moisture, %(m/m), Max.	10.0	11.0	12.0
(ii)	Extraneous matter, % (m/m)	Up to 1%	Up	to 2%
(iii)	Pinheads & broken berries, %(m/m),	Up to 4.0%	Up to 6%	Up to 8%
B.	Optiona	I (Industrial/Pro	ocessor)	
(iv)	Bulk Density g/L,	490 & above		Below 490
(v)	Total ash %(m/m)on dry basis Max.	6.0	6.5	7.0
(vi)	Light berries %(m/m),	Up to 5.0	Up to 7.5	Up to 10.0
(vii)	Piperine content, %(m/m) on dry basis, Min.	4.0	3.0	2.0
(viii)	Volatile oil, % (ml. 100 gm) on dry basis,	Up to 2.5	Up to 2.0	Above 1.0
(ix)	Non-volatile ether extract %(m/m) on dry basis,	Up to 6.0	Up to 5.5	Up to 5.0

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Broken berries means berry that has been separated into two or more pieces;
- (ii) Extraneous matter includes dust, stones, earth or any other inorganic foreign matter;
- (iii) Light berries means berry that has reached an apparently normal stage of development but the kernel does not exist;
- (iv) Extraneous matter means all materials other than black pepper berries, irrespective of whether they are of vegetable origin;
- (v) Pinhead means berry of very small size that has not developed;





#### 130.MOONG DAL SPLIT

Common name: Moong Dal

English name: Green gram-Split. Botanical name: *Vigna radiata (L).* 

## 1. Moong Dal shall be.-

- i. With or without husk split,
- ii. Wholesome, reasonably uniform in size, shape and color characteristic to the variety.
- iii. free from rodent hair and excreta, moulds, living and dead insects, insects fragments, obnoxious smell and fungus infestation, discoloration.

- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

## 4. Criteria for Range designation:

Sr.No	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Primary			
(i)	Moisture, (% by wt), Max	11.0	12.0	14.0	
(ii)	Foreign matter, (% by wt), Max	1.0	1.5	2.0	
(iii)	Other edible grains, (% by wt), Max	1.0	2.0	3.0	
(iv)	Damaged grains, (% by wt) , Max	2.5	3.5	5.0	
(v)	Weevilled grains, (% by count), Max.	3.0	5.0	7.0	
(vi)	Admixture, (% by wt), Max.	1.0	2.0	3.0	
(vii)	Broken fragments, (% by wt), Max.	1.0	2.0	3.0	
B.	Optional (Industrial/Processor)				
(viii)	Uric Acid	Not more than 100mg/kg.			
(ix)	Aflatoxin	Not mo	ore than 30 micro	gram/kg.	

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

# 6. Definitions:

- (iv) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filthetc.
- (v) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (vi) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses:
- (vii) Weevilled grains: means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (viii) Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (ix) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 131.CHANA DAL SPLIT

Common name: Chana dal/

English name: Chana Dal Split, Bengal Gram-

Split Botanical name: Cicer arietinum.

#### 1. Chana Dal shall be.-

- i. With or without husk split.
- ii. clean, wholesome, reasonably uniform in size, shape and color characteristic to the variety.
- iii. free from rodent hair and excreta, moulds, living and dead insects, insects fragments, obnoxious smell and fungus infestation, discoloration.
- **2.** Variety..... (to be filled by assayer).
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer).
- 4. Criteria for Range designation:

Sr.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Primary					
(i)	Moisture, (% by wt), Max.	11.0	12.0	14.0		
(ii)	Foreign matter, (% by wt), Max.	1.0	1.5	2.0		
(iii)	Other edible grains,(% by wt), Max.	1.0	2.0	3.0		
(iv)	Damaged grains, (% by wt) Max.	2.5	3.5	5.0		
(v)	Weevilled grains, (% by count), Max.	3.0	5.0	7.0		
(vi)	Admixture (% by wt) Max	1.0	2.0	3.0		
(vii)	Broken fragments, (% by wt) Max.	1.0	2.0	3.0		
B.	B. Optional (Industrial/Processor)					
(viii)	Uric Acid	Not more than 100mg/kg.				
(ix)	Aflatoxin	Not mo	ore than 30 micro	ogram/kg.		

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses;
- (iv) Weevilled grains: means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 132. URD DAL SPLIT

Common name: Urd dal/

English name : Urd Dal/Black Gram-split.

Botanical name: Vigna mungo L.

## 1. Urd Dal shall be .-

- With or without husk split, uniform in size, shape and in color
- ii. Clean, wholesome, reasonably uniform in size, shape and color characteristic to the variety.
- iii. Free from rodent hair and excreta, moulds, living and dead insects, insects fragments, obnoxious smell and fungus infestation, discoloration.
- **2.** Variety..... (to be filled by assayer).
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer).

#### 4. Criteria for Range designation:

Sr.No	Tradable Parameters	Range-1	Range-2	Range-3	
Α.		Primary			
(i)	Moisture, (% by wt), Max.	11.0	12.0	14.0	
(ii)	Foreign matter, (% by wt), Max.	1.0	1.5	2.0	
(iii)	Other edible grains,(% by wt), Max.	1.0	2.0	3.0	
(iv)	Damaged grains, (% by wt), Max.	2.5	3.5	5.0	
(v)	Weevilled grains, (% by count), Max.	3.0	5.0	7.0	
(vi)	Admixture, (% by wt), Max.	1.0	2.0	3.0	
(vii)	Broken fragments, (% by wt), Max.	1.0	2.0	3.0	
B.	Optional (Industrial/Processor)				
(viii)	Uric Acid	Not more than 100mg/kg.			
(ix)	Aflatoxin	Not mo	ore than 30 micro	gram/kg.	

#### 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses;
- (iv) Weevilled grains: means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.



#### 133. KABULI CHANA WHOLE

Common name:	

English name : Kabuli Chana Whole Botanical name: *Cicer arietinum* 

#### 1. Kabuli Chana shall be.-

- i. wholesome, reasonably uniform in size, shape and color characteristic to the variety.
- ii. free from rodent hair and excreta, moulds, living and dead insects, insects fragments, obnoxious smell and fungus infestation, discoloration.
- **2.** Variety..... (to be filled by assayer).
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer).
- 4. Criteria for Range designation:

Sr.No	Tradable Parameters	Range-1	Range-2	Range-3	
Α.		Primary			
(i)	Moisture, (% by wt), Max. 11.0		12.0	14.0	
(ii)	Foreign matter, (% by wt), Max.	1.0	1.5	2.0	
(iii)	Other edible grains,(% by wt), Max.	1.0	2.0	3.0	
(iv)	Damaged grains, (% by wt), Max.	2.5	3.5	5.0	
(v)	Weevilled grains, (% by count), Max.	3.0	4.0	5.0	
(vi)	Admixture, (% by wt), Max.	1.0	2.0	3.0	
(vii)	Broken fragments (% by wt), Max.	1.0	2.0	3.0	
B.	Optional (Industrial/Processor)				
(viii)	Uric Acid	Not more than 100mg/kg.			
(ix)	Aflatoxin	Not mo	ore than 30 micro	ogram/kg.	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses;
- (iv) Weevilled grains: means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the variety in consideration.

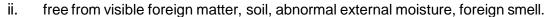


Common name: Tinda/ 🗆 🗆 🗆

English name: Indian round gourd/ Tinda. Botanical name: *P. fistulosus*.

# 1. Tinda shall be.-

 fresh, clean, wholesome, tender, firm and blemish free surface, of reasonably uniform size, of same variety and preferably hairy surface.



- iii. free from artificial color, coating of oil or application of any harmful substances.
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Primary					
(i)	Size (mm)	30 to	50	Below 30 & Above 50			
(ii)	Defects % by count: Skin defects: (Bruising/scratches/su perficial healed cut/blemishes( upto 3 sq cm of total surface area)	Upto 5%	Upto 10%	Upto 15%			
(iii)	Range Acceptance	95 %	90 %	85 %			
B.	Optional (Industrial/Processor)						
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100) /Visual	More than 70	Between 40-70	Less than 40			

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 10 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.



#### **135. JAMUN**

Common name:  $\square$   $\square$   $\square$   $\square$  English name: Java Plum. Botanical name: *S. cumini*.

#### 1. BBBBB shall be.-

 i. intact, clean, of reasonably uniform size & shape, color characteristics to the variety, with or without stalk
 .



- ii. free from, visible foreign matter, abnormal external moisture, foreign smell, mould infestation and bore.
- iii. free from artificial color, coating of oil or any harmful substances.
- **2.** Variety..... (to be filled by assayer).
- 3. Actual Picture of the lot ...... (to be uploaded by assayer).

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Primary					
(i)	Size (mm) Diameter	Above 30	Above 25	Upto 25		
(ii)	Defects % by count (Max):- Bruising/ soft patches (upto 1 sq. cm of total surface area)	4%	7%	10%		
(iii)	Range Acceptance	95 %	90 %	85%		
B.	Optional (Industrial/Processor)					
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100) /Visual	More than 70	Between 40-70	Less than 40		

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 10 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 Nos. shall be drawn from primary sample called as Laboratory sample.

#### 136. CARDAMOMS WHOLE

cardamomum

## 1. CARDAMOMS capsules shall be .-

- i. Wholesome, clean, dried, nearly ripened, reasonably uniform in size, oblong shape with a rounded part or three cornered and having ribbed appearance and color characteristic to the variety;
- ii. well formed capsule contains sound seeds;
- iii. free from obnoxious odor or flavor including those of rancidity, mustiness and fungus infestation.
- **2.** Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot ...... (to be uploaded by assayer)

## 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	Moisture, %(m/m), Max.	11.0	12.0	13.0	
(ii)	Extraneous matter , %, (m/m), Max.	1.0	2.5	5.0	
(iii)	Empty and malformed capsules % by count	3.0	5.0	7.0	
(iv)	Immature and shriveled capsules (Max.)	3.0	5.0	7.0	
(v)	Black and split percent by count(Max.)	5.0	10.0	15.0	
B.	Optiona	l (Industrial/Pr	ocessor)		
(vi)	Bulk Density g/L	Upto 435	Above 400	Up to 400	
(vii)	Total Ash, % (m/m),	Not more than 9.5			
(viii)	Volatile oil % (ml/100 gm) on dry basis,	Not less than 3.5			

#### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Extraneous matter includes stones, dust, earth or any other inorganic foreign matter it also includes pieces of Calyx, stalk and foreign matter of plant origin.
- (ii) Empty and malformed capsules means which have no seeds or are scantily filled with seeds.
- (iii) Immature and Shrivelled capsules means which are not fully developed.
- (iv) Blacks include capsules which are blackish to black in colour.
- (v) Splits include capsules which are open at corners for more than half the length.



#### 137. CLOVES WHOLE

Botanical name: Syzygium aromaticum

#### 1. Clove shall be.-

- i. Wholesome, clean, dried, fully grown but unopened floral buds, reasonably uniform in size, shape and colour characteristic to the variety;
- ii. well formed and contains sound seeds.
- iii. free from obnoxious odour or flavor including those of rancidity and mustiness and fungus infestation.
- **2.** Variety ..... (to be filled by assayer).
- **3.** Actual Picture of the lot ...... (to be uploaded by assayer).
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Primary			
(i)	Moisture, %(m/m) ( Max.)	11	.0	12.0	
(ii)	Extraneous matter % (m/m) (Max.)	1.0	2.0	5.0	
(iii)	Headless cloves percent by mass	Upto 3.0	Upto 5.0	Upto 10.0	
(iv)	Immature and Khoker cloves, percent by mass (Max.)	2.0	3.0	5.0	
(v)	Insect damage,% (Max)	2.0	3.0	5.0	
B.	Optional (Industrial/Processor)				
(vi)	Volatile oil % (ml/ 100 gm) on dry basis (Min.)	17.0	15.0	14.0	

#### 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Extraneous matter includes dust, dirt, stones, and lumps of earth, also vegetative part
  of cloves plant, other than cloves, such as tendrils, peduncles, cloves stems, mother
  cloves etc.
- (ii) Headless Cloves: A Clove consisting of only the receptacle and sepals and which has lost the domed shaped head.
- (iii) Khoker Cloves: A Clove which has undergone fermentation as a result of incomplete drying as evidenced by its pale brown.
- (iv) Insect damages cloves means the cloves that the partially or wholly bored by the insects.



#### **138. NUTMEG WHOLE**

Common

name: 

English

name : **Nutmeg** Botanical name:

**Myristica** 

fragrans



## 1. Nutmeg shall be .-

- i. wholesome, clean, dried seeds, fully grown, reasonably uniform in size, shape and color characteristic to the variety,
- ii. free from obnoxious odor or flavor including those of rancidity, mustiness and fungus infestation,
- iii. spherical or slightly ovoid in shape with grayish brown color and surface marked with numerous furrows,
- iv. free from any extraneous color or oil coating.
- **2.** Variety ..... (to be filled by assayer).
- **3.** Actual Picture of the lot ......( to be uploaded by assayer).

Criteria for Range designa tion:S.N	Tradable Paramete	rs	Range-1	Range-2	Range-3
A.	Primary				
(i)	Moisture, %(m/m), Upto 1			Upto 12.0	Upto 14.0
(ii)	Mace in Nutmeg %(m	n/m)		Upto 3.0	
(iii)	Extraneous matter	r		absent	
(iv)	Insect damaged, k kernels, percent by ma	oroken ass	3.0	4.0	5.0
B.	C	Optional (Industrial/Processor)			
(v)	Volatile oil % content dry	y basis		Not less the	han 6.5%

## 4. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

#### 5. Definitions:

(i) Insect of	damages kernels	s means the ke	ernels that pa	artially or wholl	y bored by the	insects.
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## **139 COCONUT WITH HUSK**

Common name: Naariyal /

English name: Coconut Botanical name: Cocos

nucifera



#### 1. Coconut shall be.-

- i. With water or without water inside kernel, fibered or
- ii. de- fibred , dry skin of same variety
- iii. Intact ,firm, free from visible defects, foreign smell
- iv. If de-fibred from three sides, but not more than 15 % of fruit weight
- **2.** Variety .....(to be filled by assayer)
- **3.** Actual Picture of the lot ......(to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Primary					
(i)	Weight (gms.)	Above 500	400 to 500	Below 400		
(ii)	Defects % by count :- Cracks( de-fibred)	absent	Upto 10%	Upto 15%		
(iii)	Range Acceptance	95 %	90 %	85 %		

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 Nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample.

#### **140. OATS RAW**

Common name: Jaye / □□ English name : Oats (Raw) Botanical name: Avena sativa

## 1. Oats Raw shall be :-

i. clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety.



**2.** Variety ..... (to be filled by assayer).

**3.** Actual Picture of the lot ...... ( to be uploaded by assayer).

### 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Primary			
(i)	Moisture % by mass, Max.	10.0	12.0	15.0
(ii)	Foreign matter, % by mass, Max.	2.0	3.0	5.0
(iii)	Admixture/Other edible grains (% by wt), Max.	3.0	5.0	7.0
(iv)	Damaged/Weeviled grains % by mass	2.0	3.0	5.0
B.	Optional (Industrial/Processor)			
(v)	Uric Acid, (Max.)	Not more than 100mg/kg		
(vi)	Aflatoxin, (Max.)	Not more than 30 microgram/kg		

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter: includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains: means any edible grains (including oil seeds) other than the one which is under consideration;
- (iii) Damaged & Weevilled Grains: grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains.



#### 141. CHERRY RED / BLACK

Common name: Cherry /  $\Box$ 

English name: Cherry

Botanical name: Prunus avium, Prunus cerasus



# 1. Cherry shall be.-

- i. intact, firm, green un-withered stalk attached to eachfruit.
- ii. clean, of reasonably uniform size, & shape, color characteristics to the variety.
- iii. reasonably free from visible foreign matter, abnormal external moisture, foreign smell, moulds infestation.
- **2.** Variety..... (to be filled by assayer).
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer).
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	Size in diameter (maximum of the equatorial section of the fruit in mm)	Above 20	Upto 20		
(ii)	Defects by count (Max):- (iv) Hail Damage	Absent	20%	40%	
	(v) Bruised / Blemishes (up to 10% of surface area of fruit)	5%	10%	20%	
(iii)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(iv)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70		More than 40	

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 10 Nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.

#### 142. BANANA RAW

English name: Banana (Raw) Botanical name: *Musa acuminate* 

#### 1. Green Banana shall be.-

i. green, firm, white flesh, color characteristics to the variety.

ii. reasonably free from visible and other visible defects, foreign smell, mould/pest infestation.

- iii. with calyx, short green un-withered stalk attached and should be in bunches.
- 2. The stalk is not torn but clearly cut, without damage to the neighboring fingers.
- **3.** Variety..... (to be filled by assayer).
- **4.** Actual Picture of the lot...... ( to be uploaded by assayer).
- 5. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3			
Α.		Primary					
(i)	Defects(% by count) (i) Cuts/Bruising/black spots( upto 20 mm on surface)	Upto 10%	Upto 15%	Above 15%			
(ii)	Range Acceptance	95 %	90 %	85 %			
B.	Optional (Ir	ndustrial/Process	or)				
(iii)	Diameter(mm)	30.00	and above	Below 30			
(iv)	Length (mm)	110	and above	Below 110			

# 6. Sampling: -

- (i) 5 % or minimum one bunch shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected bunches and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample



#### 143. PAPAYA RAW

English name: Green-papaya Botanical name: Carica papaya

## 1. Papaya shall be.-

- i. green, firm, clean, uniform size & shape, color characteristics to the variety.
- ii. reasonably free from visible foreign matter, foreign smell, mould/pestinfestation.
- iii. with short green un-withered stalk attached with thefruit.
- 2. Variety ..... (to be filled by assayer).
- **3.** Actual Picture of the lot......( to be uploaded by assayer).

## 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
(i)	Defects % by count :- Cuts, cracks, bruises, black spots and soft patches ( upto 3 sq. cm of surface area )	Upto 10	Upto 15	Above 15
(ii)	Range Acceptance	95 %	90 %	85 %
B.	C	ptional (Industrial/I	Processor)	
(iii)	Weight of individual fruit (gm.)	250- 1	000	Below 250 and above 1000

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample.



#### 144. NEEM SEEDS

Common name: Nimbori /  $\square$   $\square$   $\square$   $\square$ 

English name: Neem seed

Botanical name: Azadirachta indica var. minor Valeton



## 1. Neem seed shall be .-

- (i) naturally dried, wholesome, reasonably uniform size, & shape, color characteristics to the variety.
- (ii) free from visible foreign matter, abnoxious smell, fungus infestation and soil clumps or particles.
- (iii) hard and without pulp andouter seed coat.
- **2.** Variety..... (to be filled by assayer).
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer).

## 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
(i)	Foreign matter (% by wt.),	Upto 2.0	Upto 4.0	Upto 6.0
(ii)	Damaged seeds (% by wt.),	Upto 4.0	Upto 5.0	Upto 6.0
B.		Optional (Industrial	/Processor)	
(iii)	No. of seeds /kg	Less than 300	300 to 325	More than 325
(iv)	Moisture (% by wt.),	Upto 4.0	Upto 8.0	Above 8
(v)	Oil content (% by wt.)	-	Above 20	

## 5. Sampling-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions -

- (i) Foreign matter: includes husk, straws, weed seeds, other inedible items, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged seeds: seeds that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured seeds.

#### 145. JUTE SEEDS

Common name: Jute seeds /  $\Box$ 

English name: Jute seeds

Botanical name: white jute (Corchorus copluris), tossa jute (C.

olitorius)



#### 1. Jute seeds shall be .-

- (i) naturally dried, clean, of reasonably uniform size & shape, color characteristics to the variety.
- (ii) free from visible foreign matter, abnoxious smell, external moisture, soil clumps or particles.
- (iii) hard, detached completely from the spike, free from each other.
- **2.** Variety..... (to be filled by assayer).
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer).
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
(i)	Foreign matter (% by wt.)	Upto 3.0	Upto 5.0	Upto 8.0
(ii)	Damaged seeds (% by wt.)	Upto 4.0	Upto 5.0	Upto 6.0
B.		Optional (Industrial	/Processor)	
(iii)	Moisture (% by wt.)	Upto 4.0	Upto 8.0	Above 8.0

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions -

- (i) Foreign matter: includes husk, straws, weed seeds, other inedible items, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged seeds: seeds that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured seeds.

#### 146. TAPIOCA

Common name: **Tapioca** /

Tapioca

Botanical name: Manihot

esculanta

# 1. Tapioca shall be.-

- i. firm and straight, with small portion of root firmly cut, characteristics to the variety.
- ii. free from insects and pest
- **2.** Variety..... (to be filled by assayer).
- 3. Actual Picture of the lot...... ( to be uploaded by assayer.
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary	1	
(i)	Tuber Length(cm)	Above 30	20 to 30	Below 20
(ii)	Defects by count:- (cut/blemishes)	Upto 4.0	Upto 6.0	Upto 8.0
(iii)	Range Acceptance	95 %	90 %	85 %
B.	Optional (Industrial/Processor)			
(iv)	Woody %	absent	Upto 5	Upto 10

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 5 Nos. shall be drawn from primary sample called as Laboratory sample.



## 147. ROSE CUT FLOWER

Common name: Gulab/□□□□

□□□ English name: Rose Botanical name:

Rosa

# 6. Rose shall be -.-

- fresh, clean, not in dry condition, free from any visible foreign matter, pest, insect, cut and damage caused by them or diseases or mechanical damage due to handling, loading, unloading and transportation affecting the general appearance of the produce,
- ii. free from artificial color and flavor.
- **7.** Variety .....(to be filled by assayer)
- 8. Actual Picture of the Lot ...... ( to be uploaded by assayer).
- 9. Criteria for Range designation:

Sr.No.	Tradable Parameters	Range-1	Range-2	Range-3	
Α		Primary			
(v)	Color (Characteristic true to the variety)	More than 70	Between 40 to70	Less than 40	
(vi)	Shape & Blooming	Perfect bloomed and straight, strong stems more than 95 %	Slightly bloomed and practically straight stem more than 90 %	Reasonable bloomed, sufficiently strong, straight, more than 80%	
(vii)	Range Acceptance	95%	90 %	85%	
В	Optional (Industrial/Processor)				
(viii)	Stems length in cms	Above 50	30 to 50	Below 30	

# 10. Sampling:

- (iv) 5 % or minimum one bunch shall be randomly selected for sampling from each bunch.
- (v) 5 Nos spikes shall be drawn from each selected bunch and shall be mixed homogenously, called as primary sample.
- (vi) 5 nos. spikes shall be drawn from primary sample called as Laboratory sample.



## 148. CHHAPPAN KADDU

English name: Summer squash/vegetable

marrowBotanical name: Cucurbita pepo



# 1. Chappan kaddu shall be.-

- i. fresh, firm, clean, characteristics to the variety, with stalk intact
- ii. free from visible foreign matter, abnormal external moisture, foreign smell, insect infestation.
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Primary				
(i)	Weight/piece(gm)	Upto 100	above 100	above 150		
(ii)	Defects % by count (Max): Skin defects (cracks/cut/rotten spots) (1-5)sq. cm. of total surface area.	10%	15%	20%		
(iii)	Range Acceptance	90 %	85 %	80 %		
B.	Optional (Industrial/Processor)					
(iv)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70	Between 40-70	Less than 40		

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

#### 149. PERSIMMON

Common name: Persimon/

English name: Persimmon Botanical name: Diospyros

kaki



#### 1. Persimmon shall be.-

- i. intact, with the calyx attached, which may be with or without peduncle and dry and brown, clean, reasonable uniform in size, and characteristics to the variety,
- ii. free from visible foreign matter, abnormal external moisture, foreign smell, insect infestation.
- **2.** Variety ..... (to be filled by assayer).
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer).
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	Defects % by count: Skin defects (sun defects/ bruising/ cracks/cut/rotten spots) upto 3 sq. cm. of total surface area.	Upto10%	Upto 15%	Upto 20%	
(ii)	Range Acceptance	90 %	85 %	80 %	
B.	Optional (Industrial/Processor)				
(iii)	Color (%) (Characteristic true to the variety) Scale 1 to 100 /Visual	More than 70	Between 40-70	Less than 40	

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample.

#### 150. WALNUTS INSHELL

Common name: Akharot- in shell/

English name: Walnut-in shell Botanical name: *Juglans* 

regia



#### 1. Walnut in shell shall be .-

- i. dry, intact, matured, of reasonably uniform size, shape and color characteristics to the variety.
- ii. free from visible foreign matter, abnormal, external moisture, foreign smell, mould/insect infestation visible to the naked eye.
- iii. of current year crop
- **2.** Variety ...... (to be filled by assayer).
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer).

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	Moisture, (% by wt.)	Upto 10%	Upto 11%	Upto 12%	
(ii)	Defects by count: affecting the external appearances of the shell such as shells with adhering husk/hull, dirt and blemishes, open, broken or damaged shell	Upto 7%	Upto 10%	Upto 15%	
(iii)	Range Acceptance	95 %	90 %	85 %	
В.		Optional (Industria	al/Processor)		
(iv)	Size in diameter (mm)	26 and above	24 and above	Below 24	
(v)	Empty and stony shell % in wt.	Absent	1%	2%	

# 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously , called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

#### 151. Chrysanthemum

Common name: Olimpio Common name: Chrysanthemum

Botanical name: Dendranthema grandiflora



## 1. Chrysanthemum shall be. -

- (i) clean and fresh;
- (ii) Reasonably free from any foreign matter, damage caused by insects & diseases;
- (iii) uniform in size/color and stage of openness within each bunch;
- (iv) free from shattering, burning, diseases and chemical residue;
- (v) having two third of stem with foliage.
- **2.** Variety/colour......(to be filled by assayer).
- **3.** Actual Picture of the lot ...... (to be uploaded by assayer).

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	Shape and Blooming	Perfect stage of openness, flower should be uniform More than 95%	Slight Perfect stage of openness, flower should be uniform More than 90%	Reasonably Perfect stage of openness, flower should be uniform More than 85%	
(ii)	Flower diameter (in cm.)	Above 12	10-12	below10	
(iii)	length of stem (in cm.)	Above 60	belo	ow 60	
(iv)	Min. flower per stem		1		
(v)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(vi)	Color (in % ) (Characteristic true to the variety)	More than 70	Between 40 to70	Less than 40	

## 5. Special Note

- (i) Removal of all flowers buds except the terminal one to allow one flower to develop per stem.
- (ii) Recommended storage temperature range is 20-22 degree centigrade, relative humidity 90%.
- (iii) Flowers may be packed with a net covering.

# 6. Sampling

- (i) 5 % or minimum one picking unit shall be randomly selected for sampling.
- (ii) 5 nos. picking unit shall be drawn from each selected bunch and shall be mixed homogenously called as primary sample.
- (iii) 5 nos. picking unit shall be drawn from primary sample called as laboratory sample.

Common name: जरबेरा

English name: Gerbera

Botanical name: Gerbera jamesonii

## 1. Gerbera shall be.-

- (i) clean and fresh;
- (ii) reasonably free from any visible foreign matter;
- (iii) at the stage of openness and free from shattering;
- (iv) free from shattering, discoloration, burning, and damage caused by insects, diseases, and chemical residues.

4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Primary					
(i)	Stem length (in cm.)	More than 60	50-60	below 50		
(ii)	Flower diameter (in cm.)	More than 10	8-10	Below 8		
(iii)	Shape and Blooming	Perfect stage of openness, flower should be uniform More than 95%	Slight Perfect stage of openness, flower should be uniform More than 90%	Reasonably Perfect stage of openness, flower should be uniform More than 85%		
(iv)	Range Acceptance	95 %	90 %	85 %		
B.		Optional (Industria	l/Processor)			
(v)	Min. Flowers per stem		1			
(vi)	Color ( in % ) (Characteristic true to the variety)	More than 70	Between 40 to70	Less than 40		

#### 5. Special Note

- (i) Foliage and stems should be free from physical damage (bruises and breakage) including spots, holes, rotted tissue, wilting, burning or discoloration.
- (ii) The bunch/individual bud may be wrapped in corrugated paper to protect them from mechanical injury.
- (iii) Flowers uniform in size, not less than 8 cm diameter with straight, strong stem minimum length of 40 cm, if packed loose and mixed .
- (iv) Recommended storage temperature range is 20-22 degree centigrade, relative humidity 90%.

#### 6. Sampling:

- (i) 5 % or minimum one picking unit shall be randomly selected for sampling.
- (ii) 5 nos of picking unit shall be drawn from each selected bunch and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. picking unit shall be drawn from primary sample called as laboratory sample.

Common Name: A - - - - R

English name: Anthurium

Botanical name: Anthurium andraeanum

#### 1. Anthurium shall be. -

- (i) clean and fresh;
- (ii) reasonably free from any visible foreign matter, damage caused by insects & diseases;
- (iii) uniform in size/color and stage of openness within each bunch;
- (iv) free from physical damage (bruises and breakage) including spots, holes, rotted tissue wilting, burning, or discoloration;
- (v) called as anthurium, tailflower, flamingo flower, laceleaf etc.
- 2. Variety/colour......(to be filled by assayer).
- 3. Actual Picture of the lot ...... (to be uploaded by assayer).

## 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primar	у	
(i)	Shape (colorful heart shaped structure , generally referred to as flower)	Perfect heart shape Spathe	90 % heart shape Spathe (small to medium)	85 % heart shape Spathe
(ii)	Spathe diameter (in cm.)	15 above	10 -15	Less than 10
(iii)	Length of spathe (overall length from tip of spathe to base of the stem). (in cm.)	50 above	25-50	Less than 25
(iv)	Min. flower per stem		1	
(v)	Range Acceptance	95 %	90 %	85 %
B.		Optional (Industrial/Processor)		
(vi)	Color ( in % ) (Characteristic true to the variety)	More than 70	Between 40 to70	Less than 40

# 5. Special Note

- (i) Recommended storage temperature range is 20-22 degree centigrade, relative humidity 90%.
- (ii) Flowers may be packed with a net covering.
- (iii) Stem should be free from discoloration, burning and physical damage caused by insects, diseases and chemical residue.
- (iv) Spathe has a waxy appearance and shapes varies depending on the variety.
- (v) Overall length equals to tip of spathe to base plus stem.

#### 6. Sampling: -

- (i) 5 % or minimum one picking unit shall be randomly selected for sampling.
- (ii) 5 nos. spathe shall be drawn from each selected bunch and shall be mixed homogenously called as primary sample.
- (iii) 5 nos. spathe shall be drawn from primary sample called as laboratory sample.



Common

name: A - - - English

name: Tulips

Botanical name: Tulipa hybrid, T.orphanidea, T.clusiana



## 1. Tulips shall be.-

- (i) clean and fresh;
- (ii) reasonably free from soil, dust, damage caused by insects & diseases;
- (iii) large, showy, many colors, bi-colors and of various petal shapes;
- (iv) single, double, ruffled, fringed or lily-shaped depending on the variety;
- (v) free from shattered petals, burning, wilting, discoloration, black spots & chemical residues.
- 2. Variety & color......( to be filled by assayer).
- 3. Actual Picture of the lot.....( to be uploaded by assayer).

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Primary			
(i)	Shape and blooming (may have incredible height and shapes characteristic of variety)	Perfect stage of openness, flowers should be uniform. More than 95%	Perfect stage of openness, flowers should be uniform. More than 90%	Perfect stage of openness, flowers should be uniform. More than 85%	
(ii)	Min. flower per stem	1			
(iii)	Stem length (in cm.)	35 above	35-30	below 30	
(iv)	Range Acceptance	95 %	90 %	85 %	
B.		Optional (Industria	I/Processor)		
(v)	Stem deviation/ Curvature(max.)	2cm	2.2cm	2.5cm	
(vi)	Color ( in % ) (Characteristic true to the variety)	More than 70	Between 40 to70	Less than 40	

# 5. Special Note

- (i) Recommended storage temperature range is 22-20 degree centigrade, relative Humidity 90%.
- (ii) Packing of bunch (5-10 stems/bunch) with uniform flowers in stage of maturity & color.
- (iii) Stem strength and deviation should be measured after hydration.

### 6. Sampling: -

- (i) 5 % or minimum one picking unit shall be randomly selected for sampling
- (ii) 5 nos shall be drawn from each selected bunch and shall be mixed homogenously , called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as laboratory sample

#### 155. Spray Chrysanthemum

Common name: 4□□

English name: Spray Chrysanthemum

Botanical name: Chrysanthemum indicum, C.japonense,

C.lavandulifolium

# 1. Spray Chrysanthemum shall be.-

- (i) clean and fresh;
- (ii) free from any visible foreign matter, damage caused by insects, diseases;
- (iii) cushion, daisy, spider, button, anemone or micro type shape;
- (iv) having each stem bearing many lateral flowering stems with similar flowers;
- (v) free from shattered petals, discoloration, burning, bruises, breakage, soil, dust.
- 2. Variety & color ...... (to be filled by assayer).
- 3. Actual Picture of the lot ...... (to be uploaded by assayer).

## 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
Α	Primary				
(i)	Shape and blooming (may be cushion, daisy, spider, button, anemone or micro shaped flowers)	Perfect stage of openness, flowers should be uniform More than 95%	Perfect stage of openness, flower should be uniform More than 90%	Perfect stage of openness, flowers should be uniform More than 85%	
(ii)	length of stem (in cms)	Above 75	75-70	Below 70	
(iii)	Min.bloom per stem	5-6	4-5	3-4	
(iv)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(v)	Color ( in % ) (Characteristic true to the variety)	More than 70	Between 40 to70	Less than 40	

#### 5. Special Note

- (i) Recommended storage temperature range is 20-22 degree centigrade, Relative humidity 90%.
- (ii) Bunch may be packed with a net covering.

#### 6. Sampling: -

- (i) 5 % or minimum one picking unit shall be randomly selected for sampling.
- (ii) 5 nos. bloom shall be drawn from each selected bunch and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. bloom shall be drawn from primary sample called as laboratory sample.



Common Name: 

English name:Lily

Botanical name: *Lilium sps*.

## 1. Lilies shall be.-

- (i) clean and fresh;
- (ii) free from any visible foreign matter, damage caused by insects and diseases;
- (iii) uniform in size/color and stage of openness within each bunch;
- (iv) having foliage, stem free from physical damage (bruises and breakage) including spots, holes, rotted tissue. wilting, burning, or discoloration.
- 2. Lilly is leafy star, bowl, funnel and recurved, trumpet shaped flowers at the top of each stem.
- 3. Variety/colour......(to be filled by assayer).
- 4. Actual Picture of the lot ....... (to be uploaded by assayer).

# 5. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Primary				
(i)	Color (characteristics of the variety)	Super bright (available in many colors)	Slight bright (available in many colors)	Reasonable brighter (available in many colors)		
(ii)	Min. flower per stem	6	3	1		
(iii)	Range Acceptance	95 %	90 %	85 %		
B.		<b>Optional (Industria</b>	I/Processor)			
(iv)	Flower diameter (in cm.)	Above 10	10-7	Below 7		
(v)	Length of stem (in cm.)	Above 60	60-50	Below 50		

## 6. Special Note.-

- (i) Recommended storage temperature range is 20-22 degree centigrade, relative humidity 90%.
- (ii) Flowers may be packed with a net covering.
- (iii) Stem should be free from discoloration, burning and physical damage caused by insects, diseases and chemical residue.

## 7. Sampling: -

- (i) 5 % or minimum one picking unit shall be randomly selected for sampling.
- (ii) 5 nos. of lilies bunch shall be drawn from each selected sample and shall be mixed homogenously called as primary sample.
- (iii) 5 nos. of bunch shall be drawn from primary sample called as laboratory sample.



#### 157. CHAKHAO or BLACK RICE

Common name:

English name: Chakhao, Black Rice Botanical name: Oryza sativa

Linn,



colour

#### 1. Raw milled Black Scented Rice shall be.-

(i) clean, wholesome, long, slender, reasonably uniform in size, shape and black to purple in with marked degree of natural fragrance characteristic to the variety:

- (ii) free from obnoxious smell, fungus infestation;
- (iii) free from rodent hair and excreta, animal filth, moulds, live insects, dead insects, insects fragments.
- 2. Variety/colour..... (to be filled by assayer).
- 3. Actual Picture of the lot...... ( to be uploaded by assayer).

#### 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
(i)	Moisture (% by wt) Max	12.0	13.0	14.0
(ii)	Foreign matter (% by wt) Max	0.20	0.50	0.60
(iii)	Broken/Damaged/Chalky grains (% by wt) Max	5.0	10.0	17.0
(iv)	Red /Green grains/Paddy Grains (% by wt) Max	Nil	3.0	6.0
(v)	Other varieties of rice (% by count) Max	5.0	10.0	15.0
B.	Optional (I	ndustrial/Proces	ssor)	
(vi)	Kernel Breadth(mm)	2.0	2.3	2.5
(vii)	Kernel Length(mm)	5.0 mm and above		
(viii)	Length- breadth ratio	2.0 and above		
(ix)	Alkali Spreading Value		2-10	
(x)	Amylose content (%)		4 to 10	

## 5. Sampling: -

- (i) 5 % or minimum one carrying packaging unit shall be randomly selected for sampling.
- (ii) 200 gms shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 200 gms. shall be drawn from primary sample called as Laboratory sample.

## 158. MACE WHOLE

English name: Mace

Botanical name: Myristica fragrans

#### 1. Mace shall be.-

- (i) clean, dried flattened seed coat or aril of the ripe fruit of nutmeg tree, myristica fragrans Hountuyn, fully grown, color characteristic to the variety.
- (ii) free from admixture, added coloring matter;
- (iii) buff of light brown colour, smooth, brittle and slightly warm taste and a fragrance similar to that of nutmeg;
- (iv) having the characteristic fresh and aromatic odour and bitter acrid and warm flavour;
- (v) free from rancid taste musty odour, off-flavour, mould growth, rodent hair, excreta, filth, moulds, live insects, dead insects insect infestation, rodent contamination.
- **2.** Variety/colour.....(to be filled by assayer).
- **3.** Actual Picture of the lot......( to be uploaded by assayer).

## 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary	•	
(i)	Moisture, % by wt. (Maximum)	10.0	1	12.0
(ii)	Extraneous matter % by wt. (Maximum)	0.5	1.5	2.0
(iii)	Insect damaged, broken kernels, % by wt. (Maximum)	3.0	4.0	5.0
B.	Optiona	l (Industrial/Pr	ocessor)	
(iv)	Volatile oil % content dry basis, (Minimum)		Not less	than 7.5%

#### 5. Sampling: -

- (i) 5 % or minimum one bag shall be randomly selected for sampling.
- (ii) 100
- (iii) gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iv) 100 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

(i) Insect damages seed coat means the arils that partially or wholly bored by the insects.

#### 159. POPPY SEED

Common name: □□□□ English name: Poppy seed

Botanical name: Papaver somniferum L.

## 1. Poppy seed shall be.-

- (i) wholesome, clean, dried seeds, fully grown, reasonably uniform in size, shape and color characteristic to the variety;
- (ii) free from obnoxious odor or flavor including those of rancidity, mustiness, fungus infestation, rodent hair, excreta, filth, moulds, live insects, dead insects, insects fragments and fungus;
- (iii) free from any color or oil.
- 2. Variety/colour.....(to be filled by assayer).
- **3.** Actual Picture of the lot......( to be uploaded by assayer).

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	Moisture, % by wt. (Maximum)	10.00	11.00		
(ii)	Extraneous matter, % by wt. (Maximum)	1.0	2.0	3.0	
(iii)	Insect damaged, broken kernels, % by wt. (Maximum)	3.0	5.0	10.0	
B.	Optional (Industrial/Processor)				
(iv)	Non Volatile ether extracts, on % by wt. on dry basis (Minimum)	50 & above	Upto 45	Upto 40	

## 5. Sampling: -

- (i) 5 % or minimum one carrying packaging unit shall be randomly selected for sampling.
- (ii) 50 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 50 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

(i) Insect damages seeds means the seeds that are partially or wholly bored by the insects.



#### Common name:

English name: Cuddapah almond Botanical

name: Buchanania lanzan Spreng

## 1. Chironji shall be.-

- (i) mature, wholesome, clean, dried seeds;
- (ii) reasonably uniform in size, shape and color characteristic to the variety;
- (iii) free from obnoxious odor or flavor including those of rancidity, mustiness and fungus infestation, any other edible and non-edible seeds;
- (iv) free from rodent hair, excreta, animal filth, moulds, live insects, dead insects.
- 2. Variety/colour.....(to be filled by assayer).
- **3.** Actual Picture of the lot ...... (to be uploaded by assayer).
- **4.** Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.		Primary				
(i)	Moisture, % by wt. (Maximum)	5.5	6.0	6.5		
(ii)	Extraneous matter % by wt. (Maximum)	0.1	0.25	0.5		
(iii)	Damaged, Discolored and broken kernels, % by wt. (Maximum)	2.0	3.5	5.0		
B.	Optiona	l (Industrial/Pr	ocessor)			
(iv)	Protein content, % by wt. (Minimum)	24	22	19		
(v)	Total soluble solids, % by wt. (Minimum)	10.0	8.5	7.5		
(vi)	Oil content, % by wt. (Minimum)	54.0	52.0	48.0		
(vii)	Acidity of extracted fat expressed as Oleic acid, Max	10.0	12.0	14.0		

#### 5. Sampling: -

- (i) 5 % or minimum one carrying packaging unit shall be randomly selected for sampling.
- (ii) 50 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 50 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

(i) Insect damages seeds means the seeds that are partially or wholly bored by the insects.



#### 161. SAFED MUSLI

Common name:

English name: Chlorophytum, Indian Spider Plant, White Musli

Botanical name: Chloropytum borivilianum L.

#### 1. Safed Musli shall be.-

- Mature, wholesome, clean, dried, fully grown, whitish in colour, reasonably uniform in size, shape and color characteristic to the variety;
- (ii) free from obnoxious odor or flavor including those of rancidity, mustiness and fungus infestation:
- (iii) free from rodent hair, excreta, animal filth, moulds, live insects, dead insects.
- **2.** Variety/colour.....(to be filled by assayer).
- **3.** Actual Picture of the lot ......( to be uploaded by assayer).
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Primary					
(i)	Moisture, % by wt. (Maximum)	9.0	10.0	11.0			
(ii)	Extraneous matter, % by wt. (Maximum)	0.2	0.5	0.75			
(iii)	Damaged, Discolored and broken kernels, % by wt. (Maximum)	2.0	3.5	5.0			
B.	Optiona	l (Industrial/Pı	rocessor)				
(iv)	Crude Fiber, % by wt. (Maximum) (on dry basis)	3.0	4.0	5.0			
(v)	Total Ash, % by wt. (Maximum) (on dry basis)	3.5	4.5	5.5			
(vi)	Acid Insoluble ash, % by wt. (Maximum) (on dry basis)	0.5	0.7	0.9			
(vii)	Saponin content, % by wt. (Maximum) (on dry basis)	15.0	10.0	5.0			

#### 5. Sampling: -

- (i) 5 % or minimum one packaging unit shall be randomly selected for sampling.
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.

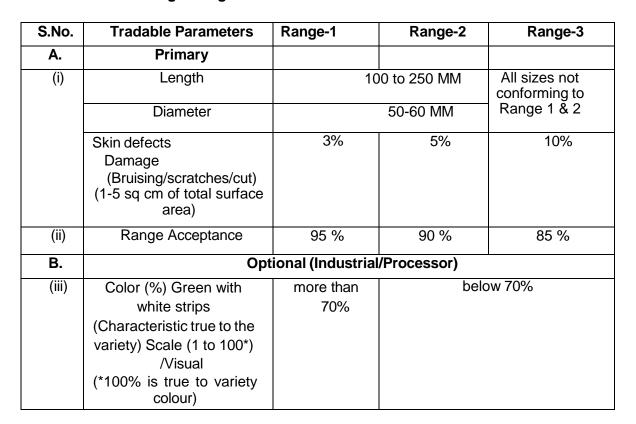


#### **162. SPONGE GOURD**

Botanical name: Luffa aegyptiaca Mill., syn. Luffa cylindrica Roem

## 1. Sponge Gourd shall be.-

- (i) wholesome, firm, fresh, clean, of reasonably uniform size, of same variety;
- (ii) free from any infestation and undesirable defect.
- **2.** Variety/colour...... (to be filled by assayer)
- **3.** Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. Criteria for Range designation:



## 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 5 nos shall be drawn from each selected packing unit and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample



#### **163. PASSION FRUIT**

Common name: | | | | | Æ | | | / | | ® | | | |

English name: Passion fruit

Botanical name: Annona reticulate for purpple, Passiflora edulis

f. flavicarpa Deg.for yellow

#### 1. Passion Fruit shall be.-

(i) whole, with stem/stalk intact, firm, clean, fresh in appearance & color characteristics to the variety;

(ii) free from, visible foreign matter, abnormal external moisture, foreign smell, pests and damage, excluding condensation following removal from cold storage, free of cracking.

2. Variety/colour .....(to be filled by assayer)

3. Actual Picture of the lot...... ( to be uploaded by assayer)

4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Primary					
(i)	Defects % by count (Max):- Blemishes, scars, sunspots, very slight superficial defects (0.5-2 sq. cm. of total surface area)	3%	5%	10%		
(ii)	Range Acceptance	95 %	90 %	85 %		
	Op	otional (Industrial/	Processor)			
(iii)	Size (diameter in mm)	78 & above	56 to 77	Less than 56		
(iv)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

## 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 5 nos shall be drawn from each selected packing unit and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample



#### 164. Broccoli/Calabrese

Common name: ≰□□□□□□
English name: Broccoli

Botanical name: Brassica oleracea L.

Varieties name: Calabrese broccoli, destiny broccoli, and belstar broccoli



#### 1. Broccoli flower clusters shall be.-

- (i) fresh in appearance and dark bright green, colour with closed flower buds; clean, free from visible foreign matter, traces of fertilizer or chemicals;
- (ii) intact, sound, free from rotting or deterioration;
- (iii) free of pests affecting the general appearance of the produce, any foreign smell and/or taste;
- (iv) free of damage caused by pests and diseases;
- (v) free of abnormal external moisture, larvae, mites, caterpillars etc, blackening of tips of flower.
- 2. Variety/colour..... (to be filled by assayer)
- 3. Actual Picture of the lot....., colour (to be uploaded by assayer)

#### 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary				
(i)	Defects % by count (Max):- (i) Bruising (3 sq cm of total surface area)	5 %	5 %	7 %	
	(ii) Colour (1-3 sq cm of total surface area)	3 %	5 %	7 %	
	(iii) Wooliness (1-5 sq cm of total surface area)	3%	5%	7%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	Option	nal (Industrial/Pro	ocessor)		
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 90	Between 60-90	Between 60- 90	

## 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 5 nos shall be drawn from each selected packing un it and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample

#### **165. SUGAR SNAP PEAS**

Common name:

English name: Sugar Snap peas, Snow peaBotanical name: Pisum sativum (L)



## 1. The Peas pods shall be.-

- (i) intact, clean and sound, fresh in appearance;
- (ii) free from black/brown spots on pods, insect damage, rotten tips, free of foreign matter, external moisture; pest and damage caused by pests, any foreign smell;
- (iii) free from seeds, or if present shall be small and undeveloped.
- 2. Variety/colour..... (to be filled by assayer)
- 3. Actual Picture of the lot.....( to be uploaded by assayer)
- 4. Criteria for Range designation:

SI.No.	Tradable Parameters	Range-1	Range-2	Range-3
Α.		Prim	ary	
(i)	Defects (Max)			
	(i) Dry skin	5%	10%	15 %
	(covering surface area)			
	(ii) Black/ brown spots	Upto 3%	Upto 7%	Upto 10%
(ii)	Size (Length in mm)	Upto 65mm	Upto 55mm	Upto 45 mm
(iii)	Range Acceptance	95%	90%	85%
B.		Optional (Indust	rial/Processor)	
(iv)	Color (%)	More than 70	Between 40-70	Less than 40
	(Characteristic true to			
	the variety) Scale (1 to			
	100*) /Visual `			
	(*100% is true to			
	variety colour)			

## 5. Sampling.

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling.
- (ii) 200 g shall be drawn from each selected packing unit and shall be mixed homogenously called as primary sample
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample

Common name:

English name: Aloevera

Botanical name: Aloe barbadensis miller.

.

#### 1. Aloevera shall be.-

- (i) fresh in appearance and dark green, bright green in colour;
- (ii) intact, firm, clean, sound, produce affected by rotting or deterioration such as to make proper selected produce;
- (iii) free of pests affecting the general appearance of the produce, damage caused by pests and diseases.
- 2. Variety/colour..... (to be filled by assayer)
- **3.** Actual Picture of the lot....., colour (to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3			
A.		Primary					
(i)	Defects % by count (Max):- Bruising (1 sq cm of total surface area)	3 %	5 %	7 %			
(ii)	Length of stem (in cm)	More than 50	40-50	below 40			
(iii)	Thickness (in cm)	More than 3	Upto 2-3	below 2			
(iv)	Width (in cm)	More than 6	Upto 5	below 5			
(v)	Range Acceptance	95 %	90 %	85 %			
B.	C	Optional (Industr	rial/Processor)				
(vi)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 90	Between 60-90	Between 60-90			

# 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 5 nos shall be drawn from each selected packing unit and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample



#### 167. OYSTER MUSHROOM

Common name: □□□□□□□□□□□V□ (□□™□□□Ŝ□)

English name: Oyster Mushroom

Botanical name: Pleurotus species of the family Pleurotaceae excluding King Oyster mushroom (Pleurotus eryngii species)



#### 1. Oyster Mushroom shall be.-

- (i) whole, cluster or single, fresh characteristic of the variety;
- (ii) sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- (iii) clean, practically free of any visible foreign matter;
- (iv) practically free of pests and damage caused by them affecting the general appearance of the produce;
- (v) free of abnormal external moisture, free of bruises and blemishes.
- 2. Variety/colour..... (to be filled by assayer)
- 3. Actual Picture of the lot.....( to be uploaded by assayer)

# 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Primary					
(i)	Defects (Oyster mushroom in cluster) for bloom- cap % by count (Max):- Bruising, rubbing and other superficial defects such as brakage and blemishes, (total surface area) The defects must not, in any case, affect the gill.	3 %	5 %	7 %		
	Shape	5%	10%	15%		
(ii)	Size (Diameter of the cap in cm)	5 & above	Upto 5	below 3		
	Range Acceptance	95 %	90 %	85 %		
B.	Optional (Industrial/Processor)					
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 90	Between 60-90	Between 60-90		

# 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 10 nos shall be drawn from each selected packing unit and shall be mixed homogenously called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

#### 168. Button Mushroom

#### 1. Button Mushroom shall be.-

- (i) whole, cluster or single, free from poisonous variety, fresh characteristic of the variety;
- (ii) sound, produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- (iii) clean, practically free of any visible foreign matter with the exception of the cultivation substrate adhered to the mushroom base;
- (iv) free of abnormal external moisture, free of bruises and blemishes.
- 2. Variety/colour .....(to be filled by assayer)
- 3. Actual Picture of the lot ...... ( to be uploaded by assayer)
- 4. The number of stalks shall not exceed the number of caps.
- 5. Criteria for Range designation:

S. No.	Tradable Para	meters	Range-1	Range-2	Range-3
A.			Primary		
(i)	Defects ( mushroom i for bloom- cap % by count (Max):- Bruising, rubbing superficial defects breakage and blen surface area) The cont, in any case, affer	and other such as nishes, (total defects must	3 %	5 %	7 %
	Shap	е	5%	10%	15%
(ii)	Size (Diameter of the	ne cap in cm)	5 & above	Upto 5	Below 3
(iii)	Range Accep		95 %	90 % 85 %	
B.			onal (Industrial/Proce	1	
(iv)	Color (%	,	More than 90	Betv	ween 60-90
	(Characteristic true t Scale (1 to 100*) / (*100% is true to varie	√isual			
(v)	Mineral impurities% (m/m)	Wild growing mushroom Cultivated	0.1	0.3	
(vi)	Organic impurities of vegetable origin,% (m/m)	Wild growing	0.5	1	
	(111/111)	mushroom Cultivated	3(for uncut) 0.5 (for cut)	5 (for uncut) 1 (for cut)	8(for uncut) 1 (for cut)
(vii)	Content of maggot damaged mushroom,% (m/m)	Wild growing mushroom	2	4	6
		Cultivated	0.5	1	

# 6. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 10 nos shall be drawn from each selected packing unit and shall be mixed homogenously called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample



Common name: □□□′□
English name: Gherkin

Botanical name: Cucumis sativus,, C.angura

#### 1. Gherkin shall be.-

(i) fresh in appearance, well formed, intact;

(ii) free from disease, soil, dust, wilting, burning, spots, holes and discoloration;

(iii) free of damage caused by high & low temperature, injury caused by scars, bruises ,badly curved/deformed, or shriveled;

(iv) uniform in size, shape, color and free from stem or flowers.

2. Variety/colour......( to be filled by assayer).

3. Actual Picture of the lot...... ( to be uploaded by assayer)

4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Primary					
(i)	Defects % by count (max.)	3%	5%	7%		
(ii)	Shape and color (not less than of the total surface area)	well developed & green or dark green(not less than 3/4)	well developed & green with slight yellowing(not less than 3/4)	well developed & green with some yellowing( not less than 2/3)		
(iii)	Length of the fruit (in cm)	Upto 3-5	U	pto 5-7		
(iv)	Range Acceptance	95 %	90 %	85 %		
B.	Optional (Industrial/Processor)					
(v)	Color(%)characteristic to the variety(1- 100)/visual	More than 70	E	Between 30-70		

# 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 100 gms shall be drawn from each selected packing unit and shall be mixed homogenously, called as primary sample
- (iii) 50 gms. shall be drawn from primary sample called as laboratory sample

**Optional parameters:** are voluntary and may be analyzed as per buyer-seller agreement.

Note: Gherkin is practically straight and not more than very slightly constricted or more than moderately tapered or pointed.



#### 170. Grapefruit

Common name: English name: Grapefruit

Botanical name: Citrus x paradisi

# 1. Grapefruit shall be-

- whole, fresh, well formed, intact, firm;
- (ii) free from disease, pest, abnormal external moisture, foreign smell or taste;
- (iii) uniform in shape, size, color and undamaged skin(peel),dry skin, decay;
- (iv) free from dust or any visible foreign matter, black spot, scab, spray burns.
- 2. Variety/colour......(to be filled by assayer)
- 3. Actual Picture of the lot ...... (to be uploaded by assayer)
- 4. Criteria for Range designation:

S.	Tradable Parameters	Range-1	Range-2	Range-3	
No.		Duine			
Α.		Primary			
(i)	Defects	2%	5%	10%	
	%by count(max.)				
	Discoloration (0.5-2 sq.				
(11)	cm of total surface area)				
(ii)	Shape(oblate) and color	uniform color	uniform color	uniform color	
	of fruit(orange-yellow or	and shape	and shape	and shape	
	orange-red)	normal to the	normal to the	normal to the	
		variety	variety	variety	
(iii)	Size of the	Upto1500	Upto1000	Upto 500 mm	
	fruit)(diameter of the equatorial section)	mm	mm		
(iv)	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
(v)	Color(%)characteristic to	More than 85	More than 70	More than 60	
	the variety(1-100)visual				
(vi)	Juice content % min. Juice wt./fruit wt.	40%	38%	35%	

# 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 5 nos shall be drawn from each selected packing unit and shall be mixed homogenously, called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as laboratory sample
- 6. **Special Note:** Fruits should not have coarse corrugated skin(peel), shriveled or immature, degreening is allowed provided that it does not affect the produce.



#### 171. Rapeseed

Common name:

English name: Taramira, Rapeseed Botanical name: Brassica rapa, B.napus

## 1. Rapeseed shall be-

(i) clean, wholesome reasonably uniform in size, shape and color, free from argemone seeds;

(ii) free from obnoxious smell and fungus infestation.

**2.** Variety/colour......(to be filled by assayer)



4. Criteria for Range designation:

	Criteria for Range designation					
S.	Tradable Parameters	Range-1	Range-2	Range-3		
No.						
A.	Primary					
(i)	Oil content(%by wt) Min.	40.0	35.0-40.0	Below 35.0		
(ii)	Moisture (%by wt) Max.	8.0	9.0	10.0		
(iii)	Foreign matter (%by wt) Max.	3.0	5.0			
(iv)	Damaged and discolored seeds(%by wt)Max.	3.0	5.0			
(v)	Other edible seeds (%by wt) Max.	0.5	0.8	1.0		
(vi)	Range Acceptance	95 %	90 %	85 %		
B.	Optional (Industrial/Processor)					
(vii)	Allyl iso thiocynate(m/m) On dry basis	No	t less than 0.7 perce	ent by weight		

#### 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling
- (ii) 100 gm shall be drawn from each selected packing unit and shall be mixed homogenously, called as primary sample
- (iii) 50 gm shall be drawn from primary sample called as Laboratory sample



Common name: Hilsa,

Zoological name: Hilsa shad, Tenualosa ilisha

## 1. Hilsa shall be-

(i) clean, wholesome finfish, intact, either in raw chilled or frozen condition;

(ii) free from disease, skin patches, stomach broken and obnoxious smell, or any other added chemical free from visible scar, parasite, grease, soil;

(iii) free from any scar/cuts, dip in formaline or any chemical, use of added coloring/chemicals.

2. Actual Picture of the lot ...... ( to be uploaded by assayer)

3. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary	у	
(i)	Size determined by (wt. per piece in gm)	More than 800 gm	300-800 gms.	300 gm below

4. Quality Index Method(QIM):

Quality mater Method  Quality parameter	Character	Score (ice/seawater)
General appearance	Skin	0 Bright,
		shining
		1 Bright
		2 Dull
	Bloodspot on	0 None
	gill cover	1 Small, 10-
		30%
		2 Big, 30-
		50%
		3 Very big,
	0.111	50-100%
	Stiffness	O Stiff,
		in rigor
		mortis
		1 Elastic 2 Firm
		3 Soft
	Belly	0 Firm
	Delly	1 Soft
		2 Belly
		burst
	Smell	0 Fresh,
	<b>55</b>	seaweed/metallic
		1 Neutral
		2 Musty/sour
		3 Stale meat/rancid
Eyes	Clarity	0 Clear
		1 Cloudy
	Shape	0 Normal
		1 Plain
		2 Sunken
Gills	Colour	0 Characteristic, red
		1 Faded, discoloured

	Smell	0 Fresh,seaweed/metallic	
		1 Neutral	
		2 Sweaty/slightly rancid	
		3 Sour stink/stale, rancid	
Sum of scores		(min. 0 and max. 20)	

#### **Results of QIM:**

Sum of Scores QIM	Range
0-9	1
9-15	2
15-20	3

#### 5. Other requirements:

- (i) Chilling can be achieved either by using ice, chilled water or refrigerated water which will not affect the quality of fish.
- (ii) Freezing or any cold chain management process shall be reinforced or any other traditional process by which the quality of the fish product have been maintained at low temperature during transportation, storage, distribution and including the time of final sale.

#### 6. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 Nos shall be drawn from each selected container and shall be mixed homogenously , called as primary sample
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample

#### 173. MINT LEAVES

#### 1. Mint Leaves shall be -

- (i) fresh in appearance; clean, properly drained if washed;
- (ii) free from visible foreign matter, abnormal external moisture, foreign smell/taste, damage caused by pests and produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- (iii) fee from wilting or yellow laves (dehydrated senescent).
- **2.** Variety/colour...... (to be filled by assayer)
- 3. Actual Picture of the lot.....( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Essential					
(i)	Defects % by weight (Max):- (i) Discolouration/ black leaves	3%	5%	7%		
	(ii) Damaged leaves: cracks, bruises, holes or tears, split leaves	3%	5%	7%		
(ii)	Range Acceptance	95 %	90 %	85 %		
(iii)	Bunch stem length (in mm)	200	200-250	More than 250		
B.	Opti	onal (Industrial/F	Processor)			
(iv)	Pre-packed produce stem length (in mm)	75-100	100-150	more than 150		
(v)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 70	Between 40-70	Less than 40		

#### 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected packing unit and shall be mixed homogenously called as primary sample.
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample



#### 174. CURRY LEAVES

Common name: □□□□K□□
English name: Curry leaves

Botanical name: Murraya Koenigii(L.)

# 1. Curry Leaves shall be -

- (i) fresh in appearance; intact with stalk, sound, clean, properly drained if washed;
- (ii) free from visible foreign matter, abnormal external moisture, foreign smell/taste, damage caused by pests and produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- (iii) free from sun-burn, bud formation.
- **2.** Varietycolour..... (to be filled by assayer)
- **3.** Actual Picture of the lot.....( to be uploaded by assayer)
- 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Essential				
(i)	Defects % by weight (Max):- (i) Discolouration/ black leaves	1%	5%	7%	
	(ii) Damaged leaves: cracks, bruises, holes or tears, split leaves	Absent	5%	7%	
(ii)	Range Acceptance	95 %	90 %	85 %	
B.	Opti	onal (Industrial/F	Processor)		
(iii)	Color (%) (Characteristic true to the variety) Scale (1 to 100*) /Visual (*100% is true to variety colour)	More than 90	70-90	50-70	

## 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected packing unit and shall be mixed homogenously called as primary sample.
- (iii) 200 g shall be drawn from primary sample called as Laboratory sample



Common name:

 $A \square \square \square$ 

English name: Spring Onion, Welsh Onion

Botanical name: Allium fistulosum

## 1. Spring Onion Leaves shall be -

- (i) fresh in appearance; intact with bulb, mid to dark green leaves with bulb, clean, properly drained if washed;
- (ii) free from, foreign matter, abnormal external moisture, foreign smell/taste, damage caused by pests and produce affected by rotting or deterioration such as to make it unfit for consumption is excluded;
- (iii) free from yellow leaves, mildew, spray deposits, breakdown including rots and decaying leaves.
- **2.** Variety/colour..... (to be filled by assayer)
- **3.** Actual Picture of the lot.....( to be uploaded by assayer)

## 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.	Essential			
(i)	Defects % by count (Max):- (i) Double split	2.0	5.0	Above 8.0
	(ii) Discolouration/ black leaves	3.0	5.0	7.0
	(iii) Damaged leaves: cracks, bruises,holes or tears, split	3%	5%	7%
	leaves			
(ii)	Diameter of bulb (mm)	10-15	15-18	More than 18
(iii)	Stem length (mm)	250	300-350	More than 350
(iv)	Range Acceptance	95 %	90 %	85 %
B.	Optional (Industrial/Processor)			
(v)	Color (%)	More than 70	Between 40-70	Less than 40
	(Characteristic true to the			
	variety) Scale (1 to 100*)			
	/Visual			
	(*100% is true to variety			
	colour)			

## 5. Sampling: -

- (i) 5 % or minimum one packing unit shall be randomly selected for sampling.
- (ii) 200 no. shall be drawn from each selected packing unit and shall be mixed homogenously called as primary sample.
- (iii) 100 no. shall be drawn from primary sample called as Laboratory sample



**Common name:** □ ②□` □ Æ□ □, Seema Panasa (Telugu), Nirphanas (Marathi), Irppla (Tamil), Jivikadgi (Konkani), and Jeegujje (Kannada)

English name: Bread fruit

Botanical name: Artocarpus altilis

#### 1. Breadfruit shall be:-

- (i). intact, wholesome, firm, clean, sound and of similar varietal characteristics;
- (ii). mature, have dark green to greenish yellow skin and firm flesh with uniform shape;
- (iii). free of any visible foreign matter, any foreign smell and/or taste;
- (iv). free of pests and damage caused by pests;
- (v). free of signs of internal shriveling
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot(to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3		
A.		Primary				
(i).	Size (weight in kgs)	More than 2.0	Between 1.0 to 2.0	Less than 1.0		
(ii)	Skin defects (% of total surface area) such as soft bruises, decay, worm holes, growth cracks, cuts or other skin breaks	Up to 3%	Up to 5%	Up to 7%		
(iii)	Range Acceptance	95 %	90 %	85 %		
В	Optional					
(i).	Colour (Characteristic true to variety) (% by count)	More than 70	between 40 to 70	Less than 40		

# 5. Sampling

- (i). 5% or minimum one container should be selected for sampling
- (ii). 5 nos. shall be drawn from each selected container and mixed homogenously, called as primary sample
- (iii). 2 nos. shall be drawn from primary sample called as laboratory sample



Benne hannu (Kannada), Makhanphal (Hindi), Alpukat (Marathi)

English name: Alligator Pear (Torres, Fuerte, Pinkerton, Edranol, Reed, Antillean/West Indian/Guatemalan/Hass) Botanical name: *Persea Americana Mill.* 

### 1. Avocado shall be:-

- (i). whole, sound, clean greenish or yellowish flesh with a buttery consistency and a rich, nutty flavour;
- (ii). free of any visible foreign matter, free of any foreign smell and/or taste;
- (iii). free of pests and damage caused by them affecting the general appearance of the produce;
- (iv). free of abnormal external moisture, excluding condensation following removal from cold storage;
- (v). free of damage caused by low and/or high temperatures;
- 2. Variety (to be filled by assayer):
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters		Range-1	Range-2	Range-3		
A.		Primary					
(i).	)	(i). Defects in shape	Up to 2%	Up to 4%	Up to 6%		
	(%)	(ii). Immature fruits	Up to 2%	Up to 4%	Up to 6%		
	Defects	(iii). Skin defects (% of total surface area )such as soft bruises, decay, worm holes, growth cracks, cuts or other skin breaks	Up to 3%	Up to 5%	Up to 10%		
(ii).		Range Acceptance	95%	90%	85%		
В			Optional				
(i).	Colour (Characteristic true to variety) (% by count)		More than 70	between 40 to 70	Less than 40		
(ii).		Size by wt. (in grams)		Above 80			

# 5. Sampling

- (i). 5% or minimum one container should be selected for sampling
- (ii). 3 nos. shall be drawn from each selected container and mixed homogenously, called as primary sample
- (iii). 3 nos. shall be drawn from primary sample called as laboratory sample.

Common name: \( \bigcup \cdot \bigcup \bigcup \bigcup \bigcup \bigcup \cdot \lambda \text{Rambutan}, \\ \text{Rambutan tame: } \text{Rambutan hame: } \text{Rambutan lappaceum } L. \end{array}

# 1. Rambutan shall be:-

- (i). clean, whole, sound, fresh in appearance;
- (ii). free of any visible foreign matter, any foreign smell and/or taste;
- (iii). practically free of pests and damage caused by them affecting the general appearance of the produce.



- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters		Range-1	Range-2	Range-3
A.			Primary		
(i).		No. of fruit/1 kg bunch	Less than 30	Between 30 to 40	More than 40
(ii).	(%)	(i). Defects in shape	Up to 5%	Up to 7%	Up to 10%
		(ii). Immature fruits	Up to 5%	Up to 7%	Up to 10%
	Defects	(iii). Skin defects (% of total surface area) such as soft bruises, decay, worm holes, growth cracks, cuts or other skin breaks	Up to 5%	Up to 7%	Up to 10%
(iii).		Range Acceptance	95%	90%	85%
В	Optional				
(i).	Colour (Characteristic true to variety) (% by count)		More than 70	between 40 to 70	Less than 40

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii). 5 nos. shall be drawn from primary sample called as Laboratory sample

Common name: Mangustan/□™□□,3□□`□ (Hindi), Kaattampi (Malayalam), Kokam (Marathi), Hannu (Kannada) and Kao (Bengali) English name: Mangosteen

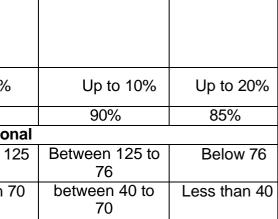
Botanical name: Garcinia mangostana L.

- 1. Mangosteen shall be:-
  - (i). whole, clean, reasonably mature, sound, fresh in appearance, having
    - colour and taste characteristic to the variety;
  - (ii). pedicel intact and with or without calyx;
  - (iii). free of any visible foreign matter, damage caused by pests, any foreign smell and/or taste.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters		Range-1	Range-2	Range-3
A.			Primary		
(i).	(%)	(i). Defects in shape	Up to 2%	Up to 4%	Up to 6%
	Defects	(ii). Skin defects (% of total surface area) such as bruising, scratches or other mechanical damage.	Up to 10%	Up to 20%	Up to 30%
(ii).	Ye	ellowish latex stains on fruit surface	Up to 5%	Up to 10%	Up to 20%
(iii).		Range Acceptance	95%	90%	85%
В	Optional				
(i).	W	eight per fruit (grams)	More than 125	Between 125 to 76	Below 76
(ii).		Colour (Characteristic e to variety) (% by count)	More than 70	between 40 to 70	Less than 40

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 5 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii). 5 nos. shall be drawn from primary sample called as Laboratory sample



### 180. WINGED BEAN

Common name: □□□ □□:□/Cigarillos, four-angled bean, four-cornered bean,

manila bean, princess bean, asparagus bean, dragon bean

English name: Winged bean

Botanical name: Psophocarpus tetragonolobus L.

- 1. Winged bean shall be:-
  - (i). whole, clean, sound, fresh, tender;
  - (ii). free of pests affecting the general appearance of the produce;
  - (iii). free of any foreign smell and/or taste;
  - (iv). reasonably uniform in size and shape
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	-	Tradable parameters	Range-1	Range-2	Range-3
A.			Primary		
(i).	(%)	(i). Discolouration	Up to 3%	Up to 5%	Up to 7%
	Defects	(ii). Skin defects (% of total surface area such as bruises and sunburn.	Up to 5%	Up to 10%	Up to 15%
(ii).		Length (in cm)	Up to 10	Up to 15	Up to 20
(iii).		Range Acceptance	95%	90%	85%
В			Optional		
(i).		r (Characteristic true to riety) (% by count)	More than 70	between 40 to 70	Less than 40

# 5. Sampling

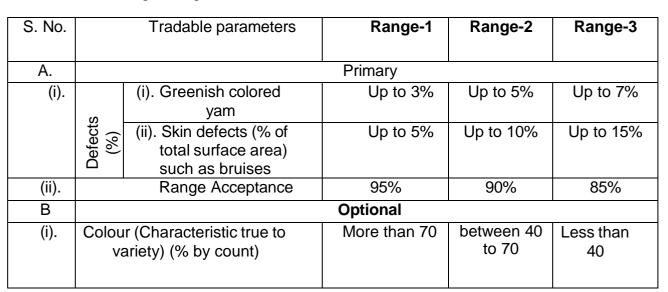
- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii). 250 g shall be drawn from primary sample called as Laboratory sample

### 181. LESSER YAM

Common name: Lesser yam/□`□□
□□□□, English name: Lesser yam
Asiatic yam, Lesser Asiatic yam

Botanical name: Dioscorea esculenta

- 1. Lesser yam shall be:-
  - (i). whole, sound, fresh, tender, clean, having color characteristic to the variety;
  - (ii). free of pests affecting the general appearance of the produce;
  - (iii). free of any foreign smell and/or taste
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation



# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii). 250 gm shall be drawn from primary sample called as Laboratory sample



Common name: Bilimbi/

Gommareku (Telugu), Pulinchikka

English name: Bilimbi, cucumber tree or tree sorrel,

bumbling plum, pickle fruit

Botanical name: Averrhoa bilimbi L.

## 1. Bilimbi shall be:-

- (i). whole, sound, fresh, tender, clean, color characteristic to the variety;
- (ii). reasonably uniform in size and shape;
- (iii). free of pests affecting the general appearance of the produce;
- (iv). free of any foreign smell and/or taste.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S.		Tradable parameters	Range-1	Range-2	Range-3
No.			_	_	_
A.		Prim	ary		
(i).	cts )	(i). Discolouration	Up to 3%	Up to 5%	Up to 7%
	Defects (%)	(ii). Skin defects (% of total surface area) such as bruises and sunburn.	Up to 5%	Up to 10%	Up to 15%
(ii).		Range Acceptance	95%	90%	85%
В	Optional				
(i).	Colour (C	Characteristic true to variety) (% by count)	Above 70	between 60 to 70	Less than 60

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii). 250 g shall be drawn from primary sample called as Laboratory sample.



Common name: \( \price \price

Ramphal

English name: Soursop

Botanical name: Annona muricata L.

# 1. Soursop shall be:-

- (i). whole, fresh, sound, reasonably mature, having color characteristic to the variety;
- (ii). free of any visible foreign matter, foreign smell and/or taste;
- (iii). free of damage caused by pests
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.		Tradable parameters	Range-1	Range-2	Range-3
A.		<u> </u>	Primary		
(i).		(i). Defects in shape	Up to 5%	Up to 10%	Up to 15%
	Defects (%)	(ii). skin defects (% of total surface area) such as scratches, shallow scars and sunburn	Up to 3%	Up to 5%	Up to 10%
(ii).		Range Acceptance	95%	90%	85%
В			Optional		
(i).	Size	e (weight per fruit) (in grams)	Above 700	Up to 700	Less than 400
(ii).	Coloui	r (Characteristic true to variety) (% by count)	Above 70	between 60 to 70	Less than 60

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 2 Nos shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii). 2 nos. shall be drawn from primary sample called as Laboratory sample

#### 184. ARROWROOT

Common name: \( \price \price

Bermuda arrowroot, araru, araruta, kooya

English name: Arrowroot

Botanical name: Maranta arundinacea

1. Arrowroot shall be:-

- (i). fresh, whole, clean, firm, reasonably mature having colour, taste and texture characteristic of the variety;
- (ii). reasonably uniform in size and shape
- (iii). free from roots, mould or deterioration so as to make it unfit for processing;
- (iv). free of any visible extraneous matter or foreign matter;
- (v). free of any foreign smell and/or taste, greening, pests and damage caused by pests.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.		Tradable parameters	Range-1	Range-2	Range-3
A.		Prim	ary		
(i).	(%)	(i) Defects in shape	Up to 3%	Up to 5%	Up to 10%
	Defects	(ii) Bruising (% of total surface area)	Up to 5%	Up to 10%	Up to 20%
	_	(iii) Scraped areas (% of total surface area)	Up to 10%	Up to 20%	Up to 30%
(ii).		Range Acceptance	95%	90%	85%

# 5. Sampling

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample

Common name: Haldi/□:□□□, curcuma, Haridra, turmeric

root English name: Turmeric

Botanical name: Curcuma longa L, Curcuma domestica V.

- 1. Turmeric rhizome shall be
  - (i). wholesome, clean, sound,
  - (ii). free from living insects and moulds,
  - (iii). smooth skin, uniform skin and flesh colors, and a clean snap when broken.
  - (iv). having characteristic odour and flavor and colour characteristic to the variety
  - (v). free from dead insects, insect fragments and contamination by rodents,
  - (vi). free from obnoxious smell and fungus infestation.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3		
A.		Primary				
(i).	Extraneous foreign matter (% by wt)	Up to 1%	Up to 1.5%	Up to 2%		
(ii).	Defective Rhizomes (% by wt)	Up to 5%	Up to 7%	Up to 10%		
(iii).	Insect defiled/infested rhizomes (% by wt)	Up to 2%	Up to 5%	Up to 10%		
(iv).	Range acceptance	95%	90%	85%		
В	Optional					
(i).	Broken pieces, fingers < 15 mm (% by wt)	Up to 5%	Up to 7%	Up to 10%		

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii). 250 g shall be drawn from primary sample called as Laboratory sample.



## Common name:

English name: Round chilli (Ramnad Mundu)

Botanical name: Capsicum anuum variety Ramnad Mundu

## 1. Chillies shall be

- (i). characteristic pungent taste, having color characteristic to the variety;
- (ii). free from foreign taste and flavour including rancidity and mustiness;
- (iii). free from mould growth, living /dead insects, insect fragments and rodent contamination;
- (iv). free from extraneous colouring matter, coating of mineral oil and other harmful substances.
- 2. Variety(to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.		Tradable parameters	Range-1	Range-2	Range-3		
A.			Primary				
(i).	ts (%)	(i) Bruising (5-10mm on surface)	Up to 3%	Up to 5%	Up to 7%		
	Defects	(ii) Discolour (5-10 mm on surface, Including sun spots)	Up to 3%	Up to 5%	Up to 7%		
(ii).		Range Acceptance	95%	90%	85%		
В		Optional					
(i).	Colour (Characteristic true to variety) (% by count)		More than 70	between 40 to 70	Less than 40		

# 5. Sampling: -

- (i) 5% or minimum one container shall be randomly selected for sampling
- (ii) 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 250 g shall be drawn from primary sample called as Laboratory sample



#### 187.GARCINIA

Common name: "" Garcinia cambogia, Garcinia, brindle berry, kudampuli, gambooge

English name: Malabar tamarind, brindle berry

Botanical name: Garcinia gummi-gutta

- 1. Garcinia cambogia shall be:-
  - (i). whole, sound, clean,
  - (ii). free of any visible foreign matter, foul smell and abnormal taste;
  - (iii). Reasonably uniform in size and shape;
  - (iv). free of damage caused by pests and pronounced blemishes;
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.		Tradable parameters	Range-1	Range-2	Range-3		
A.		Pri	mary				
(i).	(%)	(i). Defects in shape	Up to 5%	Up to 10%	Up to 15%		
	Defects	(ii). Skin defects (% of total surface area) such as bruising, scratches or other mechanical damage	Up to 5%	Up to 10%	Up to 15%		
(ii)		Range Acceptance	95%	90%	85%		
В		Optional					
(i).	Colour	(Characteristic true to variety) (% by count)	Above 70	Between 60 to 70	Less than 60		

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 gm shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii). 250 gm shall be drawn from primary sample called as Laboratory sample.

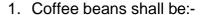


Common name: Raw Coffee beans/

English name: Raw Coffee beans

Botanical name: Coffea arabica, Coffea caenophora

(subvariety C. robusta)



- (i). clean, wholesome, reasonably uniform in size, shape and colour characteristic to the variety
- (ii). free from any foreign odour and fungus infestation
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3		
A.		Primary				
(i).	Moisture (%)	Up to 20.0	Up to 21.0	Up to 22.0		
(ii).	Insect damaged (%)	Up to 1.0	Up to 2.0	Up to 3.0		
(iii).	Extraneous matter (%)	Up to 1.0	Up to 1.5	Up to 2.0		
(iv).	Immature and shrivelled (%)	Up to 2.0	Up to 4.0	Up to 6.0		
(v).	Broken beans (%)	Up to 3.0	Up to 5.0	Up to 10.0		
B.	Optional					
(i).	Sieve test (% of mass retained on 6 mm sieve)	More than 90	More than 80	80 & Below		

# 5. Sampling

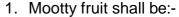
- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container shall be mixed homogenously called as primary sample.
- (iii) 250 gm shall be drawn from primary sample will be called as Laboratory sample.



Common name: Rambai, rambi, mootty, lotkon fruit (Bengali)

English name: Mootty Fruit/ Rambai

Botanical name: Baccaurea motleyana



- (i) clean, intact, firm, of reasonably uniform size & shape, color characteristic to the variety
- (ii) free from visible foreign matter, foreign smell, mould infestation
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S.	Tr	adable parameters	Range-1	Range-2	Range-3
No.					
A.		Primary			
(i).		(i). Skin defects (%			
	S	of total surface	Un to E0/	Lin to 100/	Llo to 150/
	Defects (%)	area) suchas	Up to 5%	Up to 10%	Up to 15%
	)ef	bruising,			
		sunspots etc.			
(ii)	F	Range acceptance	95%	90%	85%
В			Optional		
(i).	Colour	(Characteristic true to	More than 70	Between 60	Less than 60
		variety)		to 70	
		(% by count)			
(ii)	4)	<b>NAP 1</b> (1 / N	NA (1 00	Datum - 4.5	
	Size	Width (cm)	More than 2.0	Between 1.5 to 2.0	Less than 1.5
		Length (cm)	More than 2.5	Between 2.0	Less than 2.0
		. ,		to 2.5	

# 5. Sampling

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 250 g shall be drawn from primary sample called as Laboratory sample.

#### 190. GREEN AMARANTHUS

English name: Green amaranthus Botanical name:- *Amaranthus viridis* 

- 1. Green Amaranthus shall be:-
  - (i) clean, sound and fresh, with or without root;
  - (ii) reasonably free from foreign matter like sand and grit;
  - (iii) have a reasonably uniform colour characteristic of the variety;
  - (iv) free from any visible pests, coarse stalks, red and decayed leaves;
  - (v) be free from foreign flavour and odour,
  - (vi) reasonably free from discoloured leaves or portions thereof, flower stems (seed heads) and flower buds;
  - 2. Variety (to be filled by assayer)
  - 3. Actual picture of the lot (to be uploaded by assayer)
  - 4. Criteria for range designation

S.		Tradable parameters	Range-1	Range-2	Range-3
No.					
A.		Pri	mary		
(i).	Defects (%)	(i) Slightly damaged leaves such as cracks, bruises, holes and tears	Up to 3%	Up to 5%	Up to 10%
	Ď	(ii) Extraneous vegetable matter	Up to 3%	Up to 5%	Up to 10%
(ii).		Range acceptance	95%	90%	85%
В	Optional				
(i).	Colo	ur characteristic true to variety (% by count)	Above 70	Between 60 to 70	Less than 60

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii). 250 g shall be drawn from primary sample called as Laboratory sample.



### 191. RED AMARANTHUS

Common name: Red amaranth, blood amaranth, purple amaranth, grain amaranth,

English name: Red amaranth

Botanical name:- Amaranthus cruentus

- 1. Red Amaranthus shall be:-
  - (i). clean, sound and fresh, with or without root;
  - (ii). reasonably free from foreign matter like sand and grit;
  - (iii). have a reasonably uniform colour characteristic of the variety;



- (iv). free from any visible pests, coarse stalks, green and decayed leaves;
- (v). be free from foreign flavour and odour,
- (vi). reasonably free from discoloured leaves or portions thereof, flower stems (seed heads) and flower buds;
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S.		Tradable parameters	Range-1	Range-2	Range-3
No.			_	_	_
A.		Pri	imary		
(i).	Defects (%)	(i)Slightly damaged leaves such as cracks, bruises, holes and tears	Up to 3%	Up to 5%	Up to 10%
	De	(ii)Extraneous vegetable matter	Up to 3%	Up to 5%	Up to 10%
(ii).		Range acceptance	95%	90%	85%
В	Optional				
(i).	Colou	r characteristic true to variety	Above 70	between	Less than
		(% by count)		60 to 70	60

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 g shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii). 250 g shall be drawn from primary sample called as Laboratory sample.

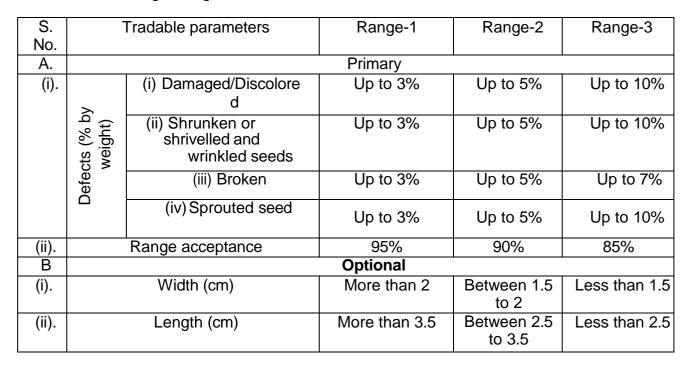
#### 192. JACKFRUIT SEED

Common name: □□□□□□`

English name: Jackfruit seed

Botanical name: Artocarpus heterophyllus

- 1. Jackfruit seeds shall be:-
  - (i) intact, sound, clean, well-formed and obtained from mature jackfruit;
  - (ii) free from any visible pests and mold,
  - (iii) free of foreign smell and/or taste and rancidity.
  - (iv) free from blemishes, discoloration, rotting or deterioration
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation



# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 gm shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii). 250 gm shall be drawn from primary sample called as Laboratory sample.



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### 193. GINGER SEED

English name: Ginger

Botanical name: Zingiber officinale Rosc.

# 1. Ginger seed shall be:-

- (i). true to type and free from seed-borne pathogens and pests, rhizome rot and other seed-borne diseases.
- (ii). reasonably clean healthy and firm.
- (iii). practically free of any visible foreign matter, any foreign smell and/or taste.
- (iv). free of deterioration and rotting
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S.	,	Tradable parameters	Range-1	Range-2	Range-3
No.		•	_	_	_
A.		Primary			
(i).	_	Length	More than	Between 5.0 to	Less than
	i) (i		10.0	10.0	5.0
	Size (in cm)	Width	More than 3.0	Between 2.0 to 3.0	Less than 2.0
(ii).	ects (%) max	(i). Skin defect (% of total surface area) such as bruising, scratches and cuts	Up to 3%	Up to 5%	Up to 7%
	Defects max	(ii). Soft/Dry root	Up to 1%	Up to 2%	Up to 5%
		(iii). Rhizome Scales	Up to 1%	Up to 2%	Up to 5%
(iii).		Range acceptance	95%	90%	85%

# 5. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
- (ii). 250 gm shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii). 250 gm shall be drawn from primary sample called as Laboratory sample.



### 194. Silk Cocoons

Common Name: Silk Cocoons

Botanical Name: Cocoons of Bombyx mori

# 1. Silk cocoon shall be:

- (i). compact, slightly resilient, firm;
- (ii). clean and free from foreign matter and moisture
- (iii). oval to round in shape;
- (iv). free from mould growth;
- (v). uniformly wrinkled;
- 2. Variety: (Multivoltine/Bivoltine)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

SI. No.	Tra	dable parameter	Range – 1	Range – 2	Range - 3
Α			Primary		
1.	Colour	Multivoltine cross breed	Bright yellow	Light yellow	Pale yellow
		Bivoltine Cross breed	Pure White	Normal white	Dull white
2.	S	Shell ratio (silk %)	Between 22.00 to 24.00	Above 20.00 to 22.00	Above 18.00 to 20.00
3.	Estimated Renditta ( Kg)		Between 5.5 to 6.00	Above 6.0 to 6.5	Above 6.5 to 7.00
4.	Defects (malforms, double cocoons, stained, filmsy, very small cocoons) %		Upto 5	Upto 8	More than 8
5.	Rar	nge Acceptance %	More than 90	80 to 90	Less than 80
B.		Optional (Industrial/processor)			
1.	Size (N	umber of Cocoons per Kg)	Between 475 to 525	Above 525 to 575	More than 575
2.	Co	ocoon weight (in grams)	More than 2.0	Between 1.5 to 2.0	Less than 1.5

# 5. Sampling

- (i) 1 kg random sample from whole lot should be collected known as primary sample. From primary samples defective cocoon percentage should be calculated.
- (ii) 25 cocoons shall be drawn from primary sample called as laboratory sample for other tests.



### 195. Banana Stem

Common name: Banana Stem /2222 22 222

Botanical name: Stem of Musa spp

1. Banana stem shall be -

(i).intact, fresh, firm, clean;

- (ii). shining white to light yellow in color and characteristic to the variety;
- (iii). free from insect infestation, cuts, mechanical injury;
- 2. Variety....(to be filled by assayer)
- 3. Actual Picture of the lot...... (to be uploaded by assayer)
- 4. Criteria for Range designation

SI. No.	Tradable parameter	Range – 1	Range – 2	Range - 3
1.	Length (in ft.)	Between 6 to 7	Above 5 to 6	Less than 5
2.	Thickness of sheath (in inch)	Between 3 to 5	Less than 3 and more than 5	
3.	Defects (in %) i). Bruising	Less than 2	Between 2 to 5	More than 5

# 5. Sampling:

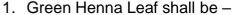
5% or 5 No (whichever is less) of the Lot shall be randomly selected and that will be called as Laboratory Sample.



# 196. GREEN HENNA LEAF

Common name: Green Henna Leaf/

Botanical name: Lawsonia inermis



- (i). clean, wholesome, reasonably uniform in size, shape and color characteristic to the variety;
- (ii). light green to greenish brown in color;
- (iii). free from any foreign matter, odour, and fungus infestation, cuts, mechanical injury.
- 2. Variety....(to be filled by assayer)
- 3. Actual Picture of the lot...... (to be uploaded by assayer)
- 4. Criteria for Range designation

SI. No.	Tradable parameter	Range – 1	Range – 2	Range - 3
1.	Moisture (%) (Max.)	3	7	10
2.	Insect damaged (%) (Max.)	Absent	5	7
3.	Foreign matter (%) (Max.)	4	7	10
4.	Immature and shriveled (%) (Max.)	3	5	7
5.	Defects (%) (Max.) Discoloration	3	5	7
6.	Range Acceptance (%)	95	90	85

# 5. **Sampling**:

(i). 5% or minimum one container shall be randomly selected for sampling.(ii). 200 g shall be drawn from each selected container shall be mixed

homogenously called as primary sample.

(iii). 200 g shall be drawn from primary sample will be called as laboratory sample.



### 197. RAW ARROWROOT POWDER

Common name: Raw Arrowroot starch

Botanical name: starch obtained from *Maranta* 

arundinacea, Curcuma augustifolia

- 1. Arrowroot powder means the separated and purified starch obtained from the rhizomes of the plants known as *Maranta* arundinacea and *Curcuma augustifolia*.
  - (i). The material shall be in the form of a fine powder and shall be white or off white in colour.
- (ii). It shall be free from rancidity, adulterants, insect infestation, and from fermented, musty or any other objectionable odour.
- (iii). It shall not contain added sweetening, flavouring or colouring agents or any foreign matter.
- (iv). The material shall be free from dirt and other suspended and extraneous matter.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.		Primary			
1.	Moisture (%) max	14.0	15	5.0	
2.	Foreign matter (%) max	0.5	1	.0	
3.	Total ash (on dry basis %) max	0.60	0.70	0.80	
4.	Starch (on dry basis %) min	98.0	96.0	94.0	
5.	Acid insoluble ash (on dry basis %) max	0.30	0.40	0.50	
6.	pH of aqueous extract		4.5 to 7.0		
7.	Sieve analysis (% passing through 75 µm IS Sieve)	98.0	97.0	96.0	

### 5. Sampling

(i). 5 % or minimum one container shall be randomly selected for sampling.(ii). 200 g shall be drawn from each selected container and shall be mixed

homogenously called as primary sample.

(iii). 200 g shall be drawn from primary sample called as Laboratory sample.



### 198. RAW HONEY

Common name: Raw Honey/ 

□□□□□

- 1. Honey shall be:-
  - (i). having sweet flavour, pleasant odour, taste and aroma characteristic to the variety
  - (ii). uniform colour throughout and may vary from light to dark brown
  - (iii). free from visible foreign matter
  - (iv). free from any added food additives such as colour and artificial sweetener;
  - (v). free from suspended particles.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.		Primary		
1.	Moisture (%) max	22.0	24.0	25.0
2.	Total soluble solids (%) min	70.0	68.0	65.0
В	Optio	onal (Industrial/	processor)	
1.	Total reducing sugars (%) min	70.0	68.0	65.0
2.	Sucrose (%) max	5.0		
3.	Specific gravity at 27°C min	1.40	1.37	1.35

# 5. Sampling

(i). 5 % or minimum one container shall be randomly selected for sampling.(ii). 200 gm shall be drawn from each selected container and shall be mixed

homogenously called as primary sample.

(iii). 200 gm shall be drawn from primary sample called as Laboratory sample.



### 199. BAJI BANANA

Common name: Baji banana, Monthan

Botanical name: Musa sp.

- 1. Baji banana shall be:-
  - (i). firm, whole, sound, clean, of reasonably uniform size and color;
  - (ii). practically free of pests and damage caused by pests;
- (iii). free of any foreign smell and/or taste;
- (iv). practically free of bruises;
- (v). free from malformation or abnormal curvature of the fingers;



- 2. Variety:
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.		Primary			
1.	Weight of Bunch (kg)	More than 15	Between 11 to15	Less than11	
2.	Weight of Banana finger (grams)	More than180	Between 160 to 180	Less than 160	
3.	No. of Hands in the Bunch	More than 10	Between 9 to 10	Less than 9	
4.	Length of Banana Finger (cm.)	More than 15	Between 10 to 15	Less than 10	
5.	Diameter of banana finger (cm)	More than 5	Between 3 to 5	Less than 3	
6.	Defects (knife wounds, cracks, bruising, black spot etc.,) % of total surface area	Less than 5	Between 5 to 10	More than 10	
В	Optional (Industrial/processor)				
1.	Colour(Characteristic true to variety)Scale (1 to 100) Visual 100% is true to variety colour	More than 70	40-70	Less than 40	

# 6. Sampling

- (i). 5 % or minimum one container shall be randomly selected for sampling.
  - (ii). 5 Lungars shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
  - (iii). 03 bunches shall be drawn from primary sample called as Laboratory sample.



## 200. MYSORE BANANA

Common name: Mysore Banana (Poovan), Berry banana

Botanical name: Musa sp.

- 1. Mysore banana shall be:-
  - (i). firm, whole, sound, clean, of reasonably uniform size and color
- (ii). practically free of pests and damage caused by pests;
- (iii). free of any foreign smell and/or taste;
- (iv). practically free of bruises;
- (v). free from malformation or abnormal curvature of the fingers;
- (vi). with the stalk intact, without bending, fungal damage or desiccation.
- 2. Variety:
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.		Primary			
1.	Weight of Bunch (Kg.)	More than12	Between 8 to 12	Less than 8	
2.	No. of Hands in the Bunch	More than 10	Between 7 to 10	Less than 7	
3.	Length of banana finger (cm.)	More than 11	Between 8 to 11	Less than 8	
4.	Defects (Bruised /Chitti/ Black spot) % of total surface area	Less than 2	Less than 5	Less than 10	
В	Optional (Industrial/processor)				
1.	Colour(Characteristic true to variety)Scale (1 to 100) Visual 100% is true to variety colour	More than 70	Between 40 to 70	Less than 40	

# 5. Sampling

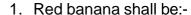
- i. 5 % or minimum one container shall be randomly selected for sampling.
- ii. 5 Lungars shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- iii. 03 bunches shall be drawn from primary sample called as Laboratory sample.



# 201. RED BANANA

Common name: Kappa Pazham, Chengadali, Chovvazhapazham (Malayalam), Red dacca,  $\Box \Box \Box$ 

□□□□Botanical name: Musa acuminata



- (i). firm, whole, sound, clean, of reasonably uniform size and color;
- (ii). have a deep red or maroon rind when ripe;
- (iii). practically free of pests and damage caused by pests;
- (iv). free of any foreign smell and/or taste;
- (v). practically free of bruises;
- (vi). free from malformation or abnormal curvature of the fingers;
- (vii). with the stalk intact, without bending, fungal damage or desiccation.
- 2. Variety:
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3		
A.		Primary				
1.	Weight of Bunch (kg)	More than 10	Between 9 to 10	Less than 8		
2.	No. of Hands in the Bunch	More than 12	Between 10 to 12	Less than 10		
3.	Length of Fruit (cm.)	More than 17	Between 14 to 17	Less than 14		
4.	Diameter of banana finger (cm)	More than 4.4	Between 3 to 4.4	Less than 3		
5.	Defects (knife wounds, cracks, bruising, black spot etc.,) (% of total surface area)	Less than 5	Between 5 to 10	More than10		
В	Optio	onal (Industrial/ <sub>I</sub>	processor)			
1.	Colour(Characteristic true to variety)Scale (1 to 100) Visual 100% is true to variety colour	More than 70	Between 40 to 70	Less than 40		

# 5. Sampling

- i. 5 % or minimum one container shall be randomly selected for sampling.
- ii. 5 Lungars shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- iii. 03 bunches shall be drawn from primary sample called as Laboratory sample.



### 202. LADY FINGER BANANA

Common name: Yelakki banana, Elaichi banana, Lady finger banana, Sugar

banana, Fig banana, Date banana, Baby banana, Ney Poovan

Botanical name: Musa acuminata

- 1. Lady finger banana shall be:
  - i. firm, whole, sound, clean, of reasonably uniform size and color;
  - ii. practically free of pests and damage caused by pests;
- iii. free of any foreign smell and/or taste;
- iv. practically free of bruises;
- v. free from malformation or abnormal curvature of the fingers;
- vi. with the stalk intact, without bending, fungal damage or desiccation.
- 2. Variety (to be filled by assayer):
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.	Primary			
1.	Weight of Bunch (kg)	More than 12	Between 10 to 12	Less than 10
2.	No. of Hands in the Bunch	More than 10	Between 9 to 10	Less than 9
3.	Length of Fruit (cm.)	More than 10	Between 8 to 10	Less than 8
4.	Diameter of banana finger (cm)	More than 4	Between 3 to 4	Less than 3
5.	Defects (knife wounds, cracks, bruising, black spot etc.,) (% of total surface area)	Less than 5	Between 5 to 10	More than 10
В	Optional (Industrial/processor)			
1.	Colour(Characteristic true to variety)Scale (1 to 100) Visual 100% is true to variety colour	More than 70	Between 40 to 70	Less than 40

# 5. Sampling

- i. 5 % or minimum one container shall be randomly selected for sampling.
- ii. 5 Lungars shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- iii. 03 bunches shall be drawn from primary sample called as Laboratory sample.



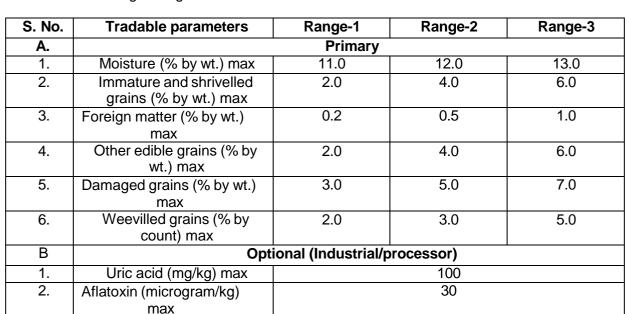
### 203. FOXTAIL MILLET

Common name: Foxtail millet, Italian millet, German millet,

Botanical name: Setaria italica

### 1. Foxtail millet shall be:-

- (i). clean, wholesome, reasonably uniform in size having color characteristic to the variety;
- (ii). free from obnoxious smell and fungal infestation;
- (iii). free from rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation



# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

# 6. Definitions:

- (i). Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii). Other Edible Grains means any edible grains other than the one which is under consideration:
- (iii). Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv). Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v). Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.



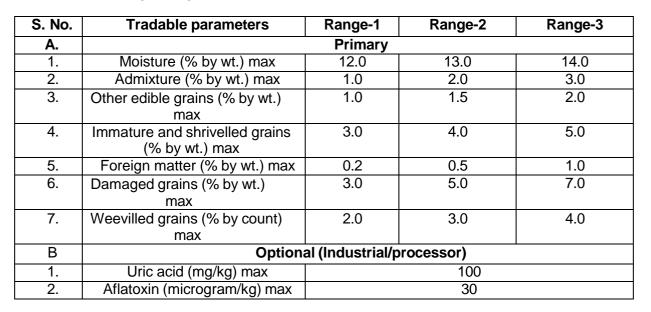
#### **204. LITTLE MILLET**

Common name: Kutki (Hindi), Sama (Bengali), Sava (Marathi), Same, Save

(Kannada), Samai (Tamil), Samalu (Telugu) Botanical name: *Panicum sumatrense* 

### 1. Little millet shall be:-

- (i). clean, wholesome, reasonably uniform in size and shape and having color characteristic to the variety;
- (ii). free from obnoxious smell and fungal infestation;
- (iii). free from rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation



# 5. **Sampling**:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

# 6. Definitions:

- (i). Admixture means the presence of a variety of the same grain other than the variety in consideration.
- (ii). Other Edible Grains means any edible grains other than the one which is under consideration;
- (iii). Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (iv). Foreign matter includes husk, straws, weed seeds, other inedible grains, metallicpieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (v). Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (vi). Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.



#### 205. KODO MILLET

Common name: Kodo (Hindi, Bengali), Kodra (Gujarati, Marathi), Harka (Kannada), Varagu

(Tamil), Arikelu, Arika (Telugu)

Botanical name: Paspalum scrobiculatum

- 1. Kodo millet shall be:-
- (i) clean, wholesome, reasonably uniform in size and shape and having color characteristic to the variety;
- (ii) free from obnoxious smell and fungal infestation;
- (iii) free from rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.		Primary		
1.	Moisture (% by wt.) max	12.0	13.0	14.0
2.	Admixture (% by wt.) max	1.0	2.0	3.0
3.	Other edible grains (% by wt.) max	1.0	1.5	2.0
4.	Immature and shrivelled grains (% by wt.) max	3.0	4.0	5.0
5.	Foreign matter (% by wt.) max	0.2	0.5	1.0
6.	Damaged grains (% by wt.) max	3.0	5.0	7.0
7.	Weevilled grains (% by count) max	2.0	3.0	4.0
В	Optional (Industrial/processor)			
1.	Uric acid (mg/kg) max		100	
2.	Aflatoxin (microgram/kg) max		30	

Kodo Millet Grain

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i). Admixture means the presence of a variety of the same grain other than the variety in consideration.
- (ii). Other Edible Grains means any edible grains other than the one which is under consideration;
- (iii). Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (iv). Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (v). Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (vi). Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.

#### 206. BARNYARD MILLET

Common name: Sanva, Samwa (Hindi), Shyama (Bengali), Bhagar (Marathi), Oodalu

(Kannada), Kuthiraivalli (Tamil), Udalu, Kodisama (Telugu)

Botanical name: Echinochloa frumentacea, Echinochloa crus-galli,

Echinochloa colona

- 1. Barnyard millet shall be:-
  - (i). clean, wholesome, reasonably uniform in size and shape and having color characteristic to the variety;
  - (ii). free from obnoxious smell and fungal infestation;
  - (iii). free from rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary				
1.	Moisture (% by wt.) max	12.0	13.0	14.0	
2.	Admixture (% by wt.) max	1.0	2.0	3.0	
3.	Other edible grains (% by wt.)	1.0	1.5	2.0	
4.	Immature and shrivelled grains (% by wt.) max	3.0	4.0	5.0	
5.	Foreign matter (% by wt.) max	0.2	0.5	1.0	
6.	Damaged grains (% by wt.) max	3.0	5.0	7.0	
7.	Weevilled grains (% by count) max	2.0	3.0	4.0	
В	Optio	nal (Industrial/p	rocessor)		
1.	Uric acid (mg/kg) max		100		
2.	Aflatoxin (microgram/kg) max		30		

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i). Admixture means the presence of a variety of the same grain other than the variety in consideration.
- (ii). Other Edible Grains means any edible grains other than the one which is under consideration;
- (iii). Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (iv). Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (v). Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (vi). Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.



#### 207. BROWNTOP MILLET

Common name: Chhoti kangni, Murat (Hindi), Hari Kangni (Punjabi), Korale (Kannada),

Palapul (Tamil), Andukorralu (Telugu) Botanical name: *Uruchloa ramosa* 

## 1. Browntop millet shall be:-

- (i) clean, wholesome, reasonably uniform in size and shape and having color characteristic to the variety;
- (ii) free from obnoxious smell and fungal infestation;
- (iii) free from rodent hair and excreta
- 2. Variety (to be filled by assayer)

3. Ad 4. Cr				
S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.		Primary		•
1.	Moisture (% by wt.) max	12.0	13.0	14.0
2.	Admixture (% by wt.) max	1.0	2.0	3.0
3.	Other edible grains (% by wt.)	1.0	1.5	2.0
4.	Immature and shrivelled grains (% by wt.) max	3.0	4.0	5.0
5.	Foreign matter (% by wt.) max	0.2	0.5	1.0
6.	Damaged grains (% by wt.) max	3.0	5.0	7.0

Browntop Millet Grain

max			
Weevilled grains (% by count)	2.0	3.0	4.0
max			
Optional (Industrial/processor)			
Uric acid (mg/kg) max		100	
Aflatoxin (microgram/kg) max		30	
	Weevilled grains (% by count) max Optio Uric acid (mg/kg) max	Weevilled grains (% by count)  max  Optional (Industrial/)  Uric acid (mg/kg) max	Weevilled grains (% by count) 2.0 3.0 max  Optional (Industrial/processor)  Uric acid (mg/kg) max 100

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i). Admixture means the presence of a variety of the same grain other than the variety in consideration.
- (ii). Other Edible Grains means any edible grains other than the one which is under consideration:
- (iii). Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (iv). Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (v). Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (vi). Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.

### 208. PROSO MILLET

Common name: Chena, Barri (Hindi), Cheena (Bengali), Vari (Marathi), Baragu (Kannada),

Proso Millet Grain

Panivaragu (Tamil), Variga (Telugu) Botanical name: *Panicum miliaceum* 

- 1. Proso millet shall be :-
  - (i). Clean, wholesome, reasonably uniform in size and shape and have color characteristic to the variety.
  - (ii). Free from obnoxious smell and fungal infestation.
  - (iii). Free from rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary				
1.	Moisture (% by wt.) max	12.0	13.0	14.0	
2.	Admixture (% by wt.) max	1.0	2.0	3.0	
3.	Other edible grains (% by wt.)	1.0	1.5	2.0	
	max				
4.	Immature and shrivelled	3.0	4.0	5.0	
	grains (% by wt.) max				
5.	Foreign matter (% by wt.)	0.2	0.5	1.0	
	max				
6.	Damaged grains (% by wt.)	3.0	5.0	7.0	
	max				
7.	Weevilled grains (% by count)	2.0	3.0	4.0	
	max				
В	Optio	nal (Industrial/p	rocessor)		
1.	Uric acid (mg/kg) max		100		
2.	Aflatoxin (microgram/kg) max		30		

### 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i). Admixture means the presence of a variety of the same grain other than the variety in consideration.
- (ii). Other Edible Grains means any edible grains other than the one which is under consideration;
- (iii). Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (iv). Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (v). Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (vi). Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.

#### 209. AMARANTH SEED

Common name: Ramdana, Rajgira (Hindi), Amaratha bija (Bengali), Chaulai beej (Punjabi),

Danthu beeja (Kannada), Keerai vidai (Tamil), Thotakoora ginjalu (Telugu)

Botanical name: Amaranthus caudatus, Amaranthus cruentus, and

Amaranthus hypochondriacus

- 1. Amaranth seed shall be:-
  - (i). clean, wholesome, reasonably uniform in size and shape and having color characteristic to the variety;
  - (ii). free from obnoxious smell and fungal infestation;
  - (iii).free from rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary				
1.	Moisture (% by wt.) max	12.0	13.0	14.0	
2.	Admixture (% by wt.) max	1.0	2.0	3.0	
3.	Other edible grains (% by wt.) max	1.0	1.5	2.0	
4.	Immature and shrivelled grains (% by wt.) max	3.0	4.0	5.0	
5.	Foreign matter (% by wt.) max	0.2	0.5	1.0	
6.	Damaged grains (% by wt.) max	3.0	5.0	7.0	
7.	Weevilled grains (% by count) max	2.0	3.0	4.0	
В	Optional (Industrial/processor)				
1.	Uric acid (mg/kg) max		100		
2.	Aflatoxin (microgram/kg) max		30		

#### 5. **Sampling**:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i). Admixture means the presence of a variety of the same grain other than the variety in consideration.
- (ii). Other Edible Grains means any edible grains other than the one which is under consideration:
- (iii). Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (iv). Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (v). Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (vi). Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.

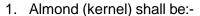
#### 210. ALMOND KERNEL

Common name: Almond kernel, Badam giri

English name: Almond kernel

Botanical name: Prunus Amygdalus Batsch. syn. and Prunus dulcis (Mill.) D.A.

Webb



- (i). sound, whole, sufficiently dried and properly cleaned;
- (ii). having uniform colour and achieved appropriate stage of maturity;
- (iii). having pleasant taste and flavour characteristic to the variety;
- (iv). free from visible mould growth, rodent contamination;
- (v). free from foreign matter, particles, dust, soil, extraneous vegetable matter, living and dead insects, insect fragments, insect eggs, mites, rodent contamination;
- (vi). free from any added coloring matter;
- (vii). free from off-odor, evidences of fermentation, mustiness and rancidity;
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot(to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3		
A.	Primary Parameters (% by wt) Max					
1.	Moisture	5.0	5.5	6.0		
2.	In shell almonds, shell or skin fragments	0.10	0.20	0.25		
3.	Rancid, rotten and damaged by insects or other pests	0.25	0.5	1.0		
4.	Gummy and brown spot	1.0	1.5	2.0		
5.	Blemished & Discolored Kernels	2.0	3.0	4.0		
6.	Shrunken or shriveled, Dissimilar kernels	3.0	6.0	10.0		
7.	Spilt, Broken & halves Kernels	2.0	3.0	5.0		
8.	Chipped & Scratched Kernels	3.0	5.0	10.0		
9.	Double & twin Kernel	3.0	5.0	10.0		
	Range Acceptance	95%	90%	85%		
В	Optio	nal (Industrial	/processor)			
1.	Acid Value of extracted Oil, as	0.4	0.6	1.25		
	oleic acid (% by wt) Max					
2.	Acid insoluble Ash %	0.1	0.1	0.1		
3.	Oil Content % by weight (Minimum)	47.0	45.0	42.0		

## 5. Sampling

- (i). 5% or minimum one container should be selected for sampling.
- (ii). 250 gm shall be drawn from each selected container and mixed homogenously, called as primary sample.
- (iii). 250 gm shall be drawn from primary sample called as laboratory sample.



#### **211. PINENUT**

Common name: Pinenut, Chilgoza, Neza

English name: Pinenut

Botanical name: Pinus pinea L., P. wallichiana and P. gerardiana

1. Pinenut shall be:-

(i). whole, intact, sound, well dried, well formed;

- (ii). have uniform size, shape, color and condition, slender, brown in color;
- (iii). possess marked degrees of natural fragrance characteristic of pine nut;
- (iv). free from artificial coloring, polishing agents, artificial fragrances and any other chemicals, obnoxious smell and mustiness;
- (v). free from rodent hair and excreta, filth, moulds, live and dead insects, insect fragments, mites, debris or excreta and fungus;
- (vi). free from any pest, whatever their stage of development;
- (vii). free from resinous materials.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer)
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary Parameters				
1.	Moisture (% by wt) Max	4.0	6.0	7.0	
2.	Foreign Matter(% by wt) Max	0.2	0.5	1.0	
3.	Insect Damaged (% by wt)  Max	0.5	1.0	1.5	
4.	Damaged (% by wt) Max	2.0	4.0	6.0	
5.	Shrivelled & Immature (% by wt) Max	1.0	2.0	3.0	
	Range Acceptance	95%	90%	85%	
В	Optional (Industrial/processor)				
1.	Acid Value of extracted oil, as oleic acid (% by wt) Max	1.5	2.5	4.0	
2.	Oil Content % by weight (Minimum)	45.0	30.0	30.0	

# 5. Sampling

- (i). 5% or minimum one container should be selected for sampling.
- (ii). 100 gm shall be drawn from each selected container and mixed homogenously, called as primary sample.
- (iii). 100 gm shall be drawn from primary sample called as laboratory sample.



### 212. LOTUS STEM

Common name: Lotus stem, Kamal kakdi, Nadroo

English name: Lotus stem

Botanical name: Nelumbo nucifera

Variety Name:

## 1. Lotus Stem shall be-

- (i). wholesome, firm, fresh, clean, of reasonably uniform size, of same variety and
- (ii). free from visible foreign matter, abnormal external moisture, foreign smell
- **2.** Variety..... (to be filled by assayer)
- **3.** Actual Picture of the lot...... ( to be uploaded by assayer)

# 4. Criteria for Range designation:

S. No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.		Primary Param	eters		
1.	Size (mm)	Up to 350	Up to 250	Up to 150	
2.	Diameter (mm) minimum	25	20	15	
3.	Defects % by count (Max):-  (i) Mechanical injury	2	5	10	
	(ii) Skin defects (Bruising/scratche s/cut) (1-10 sq cm of total surface area)	2	5	7	
	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
1.	Colour (Characteristic true to variety) Scale (1 to 100) Visual 100% is true to variety colour	More than 70	Between 40- 70	Less than 40	

# 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling
- (ii) 5 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample



### 213. MUSHK BUDJI RICE

Common name: Mushk budji rice English name : Kashmiri Aromatic rice

Botanical name: Oryza sativa

## 1. Mushk budji rice shall be:

- (i). clean, wholesome, short grain, reasonably uniform in size, shape and colour with marked degree of natural fragrance characteristic to the variety;
- (ii). free from obnoxious smell and fungus infestation.
- **2.** Variety ..... (to be filled by assayer)
- **3.** Actual Picture of the lot......( to be uploaded by assayer)
- 4. Criteria for Range designation:

Sr. No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Prima	Primary Parameters				
1.	Moisture (% by wt) Max	12.0	13.0	14.0		
2.	Foreign matter (% by wt) Max	0.50	0.75	1.0		
3.	Broken/Damaged/Chalky grains (% by wt) Max	7.0	10.0	13.0		
4.	Red /Green grains/Paddy Grains (% by wt) Max	2.0	3.0	4.0		
5.	Other varieties of rice (% by wt) Max	7.0	10.0	15.0		
	Range acceptance	95%	90%	85%		
B.	Optional (Industrial/Processor)					
1.	Alkali Spreading Value	4 to 7				
2.	Amylose content (%)	20 to 25				

## 5. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other variety of rice means the presence of a variety other than the one under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Broken grains means pieces of sound kernels that are less than three fourths of the size of full kernels.
- (v) Chalky Grains are pieces of kernels of which at least three quarters of the surface is opaque, milky white in colour and brittle in nature.
- (vi) Red grains shall be the kernels, whole or broken which have 25% or more of their surface coated with red bran. Green grains shall be the kernels, whole or broken which are greenish in color.



### 214. SNOW MOUNTAIN GARLIC

Common name: Kashmiri lahsun, Ek pothi lahsun, One pod Garlic,

Gathiya lahsun

English name: Snow Mountain Garlic

Botanical name: Allium sativum sub-species like A. ampeloprasum

Varieties name:

# 1. Snow Mountain Garlic (SMG) pod shall be-

- (i). intact, firm, clean, of reasonably uniform size & shape, color characteristic to the variety;
- (ii). free from visible foreign matter, abnormal external moisture, foreign smell;



- 2. Variety ..... (to be filled by assayer)
- 3. Actual Picture of the lot.....( to be uploaded by assayer)
- 4. Criteria for Range designation:

S.No.	Tradable Parameters	Range-1	Range-2	Range-3		
A.	Pri	Primary Parameters				
1.	Defects % by count (Max):- (i) Irregular shape	3	5	7		
	(ii) Slight tears in outer skin	2	4	6		
	Range Acceptance	95 %	90 %	85 %		
B.	Optional	(Industrial/Prod	cessor)			
1.	(i) SMG Pods diameter		0.8- 2.0 cm			
	(ii) SMG Pods length		0.8-1.5 cm			

## 5. Sampling: -

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.



#### 215. KHESARI DAL

Common name: Khesari Dal English name : Grass-pea **Botanical name:** Lathyrus sativus

#### 1. Khesari Dal shall be-

- (i). clean, wholesome, reasonably uniform in size, shape and having colour characteristic to the variety;
- (ii). free from obnoxious smell and fungus infestation.
  - **2.** Variety..... (to be filled by assayer)
  - **3.** Actual Picture of the lot...... ( to be uploaded by assayer)
  - 4. Criteria for Range designation:

Sr.No.	Tradable Parameters	Range-1	Range-2	Range-3	
A.	Primary Parameters				
1.	Moisture(% by wt) Max	10.0	12.0	14.0	
2.	Foreign matter(% by wt) Max	1.0	1.5	2.0	
3.	Other edible grains(% by wt) Max	1.0	2.0	3.0	
4.	Damaged grains(% by wt) Max	2.5	3.5	5.0	
5.	Weevilled Grains (% by count) Max	3.0	5.0	10.0	
6.	Admixture (% by wt) Max	1.0	2.0	3.0	
7.	Immature & Shrivelled (% by wt) Max	1.0	2.0	3.0	
8.	Range acceptance	95%	90%	85%	
B.	Optional (In	dustrial/Proces	ssor)		
1.	Uric Acid	Not m	nore than 100mg	g/kg	
2.	Aflatoxin	Not more than 15 microgram/kg			
3.	Total of foreign matter, other edible grains and damaged grains	Not more than 9 percent by weight			

## 5. Sampling:-

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

## 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other Edible Grains means any edible grains (including oil seeds) other than the one under consideration.
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injured grains in case of whole pulses.
- (iv) Weevilled grains means grains that are partially or wholly bored by insects injurious to grains but does not include germ eaten grains and egg spotted grains.
- (v) Immature & Shrivelled Grains means kernels or pieces of kernels that are not fully developed.
- (vi) Admixture means the presence of a variety of the same grain other than the one under consideration.



### 216. WALNUT KERNEL

Common name: Akhrot giri/ 

Barria Ba

Botanical name: *Juglans regia*1. Walnut kernels shall be:-

- (i). sound, clean, sufficiently developed and dried;
- (ii). uniform in color with characteristic taste and flavour;
- (iii). free from pests and damage caused by pests including dead insects and/or mites, their debris or excreta;
- (iv). free from mould filaments;
- (v). free from rancidity and foreign smell and/or taste;
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.		Primary		
1.	Moisture (% by wt.) Max	4.5	5.0	5.0
2.	Extraneous vegetable matter (% by wt.) Max	0.5	0.75	1.0
3.	Foreign matter (% by wt.) Max	0.1	0.3	0.5
4.	Damaged (% by wt.) Max	4.0	7.0	10.0
5.	Broken (% by wt.)	Less than 5	5-15	More than 15
	Range acceptance	95%	90%	85%
В	Option	al (Industrial/p	rocessor)	
1.	Color	Extra light/Light	Light amber	Amber
2.	Acidity of extracted oil (as oleic acid) % by wt. Max		1.25	
3.	Oil Content % by weight (Minimum)	50.0	45.0	40.0

### 5. **Sampling**:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

### 6. Definitions:

- (i). Extraneous vegetable matter means the vegetable matter associated with the plant from which the product originates.
- (ii). Foreign matter is any matter or material not usually associated with the product.
- (iii). Damaged means the kernels affected by sunburn, scars, mechanical injury, discoloration or visible damage caused by boring and feeding of insects and animal parasites.
- (iv). Broken pieces are portions of kernels which can pass through a 8mm round hole screen but not through a 3mm round hole screen.



### 217. KHANDSARI

Common name: Khandsari sugar, Khand

English name: Un-Refined sugar, Muscovado sugar, Barbados sugar

Botanical name: Saccharum officinarum is the plant from which it is extracted

- 1. Khandsari shall be:-
  - (i) in crystalline or powder form;
  - (ii) white or yellowish white in colour;
  - (iii) sweet in taste;
  - (iv) free from dirt, filth, iron filings and added colouring matter;
- 2. Variety/type (to be filled by assayer)



- (i) Khandsari (Desi): Khandsari obtained from sugarcane juice using open pans for concentration and clarified using natural clarificants.
- (ii) Khandsari (Sulphur): Khandsari obtained from sugarcane juice using open pans for concentration and clarified using sulphur.
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S.	Tradable		Khandsar	i (Desi)	K	Khandsari (S	Sulphur)
No.	parameters						
		Range-1	Range-2	Range-3	Range-1	Range-2	Range-3
A.		Primary					
1.	Moisture (% by wt.) Max	0.7	1.0	1.5	0.7	1.0	1.5
2.	Extraneous matter (% by wt) Max	0.15	0.25	0.50	0.15	0.25	0.50
3.	Sucrose/Polarization (%) Min	95	94	93	97.5	97	96.5
4.	Acid insoluble ash (% by wt.) Max	0.3	0.5	0.7	0.2	0.4	0.5
5.	Specific conductivity (mhos/cm²×10 <sup>6</sup> ) in 5% solution at 30°C, Max		100			300	
	Range acceptance	95%	90%	85%	95%	90%	85%
В		Optional (Industrial/processor)					
1.	Sulphur dioxide (mg/kg) Max		Nil			70	
2.	Calcium oxide (mg/100g) Max		50			100	

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

Common name: Kiwi fruit, Chinese gooseberry English name: Kiwi fruit, Chinese gooseberry

Botanical name: Actinidia chinensis Planch. and Actinidia deliciosa (A.

Chev.)



- (i). adequately firm, not soft, shrivelled or water soaked;
- (ii). intact, sound, clean, well formed and fresh in appearance;
- (iii). practically free from pests and damage caused by pests affecting the flesh;
- (iv). free from any foreign smell and/or taste.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.		Primary		
1.	Size (gm)	More than 90	65-90	Less than 65
2.	Defects (% by count) Max. (i) Defects in shape	4	6	8
	(ii) Defects in colour	4	6	8
	(iii) Skin defects such as small healed cuts or scarred/grazed tissue (0.5-2.0 sq cm of total surface area)	4	8	12
3.	Ratio of minimum/maximum diameter of the fruit measured at the equatorial section	More than 0.8	More than 0.7	-
	Range acceptance	95%	90%	85%
В	Optio	nal (Industrial/p	rocessor)	
1.	Colour (Characteristic true to variety)Scale (1 to 100) Visual 100% is true to variety colour	More than 70	40-70	Less than 40

### 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 10 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.

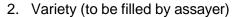


Common name: Sarda

English name: Canary melon, Sun melon, Winter melon

Botanical name: Cucumis melo

- 1. Sarda shall be:-
  - (i) intact, firm, sound, clean and fresh in appearance;
  - (ii) with greenish yellow skin and sweet in taste;
  - (iii) sufficiently developed and display satisfactory maturity and or ripeness;
  - (iv) practically free from pests and damage caused by pests affecting the flesh;
  - (v) free from any foreign smell and/or taste.



- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.		<b>Primary Parame</b>	eters	
1.	Size (gm)	More than 500	300-500	Less than 300
2.	Diameter (cm)	Not less than 8.5	7.5-8.5	Less than 7.5
3.	Defects (% by count) Max. (i) Defects in shape	4	6	8
	(ii) Defects in colour	4	6	8
	(iii) Skin defects such as cracks, scratches or bruises (0.5-2.0 sq cm of total surface area)	3	7	10
	Range acceptance	95%	90%	85%
В	Optio	nal (Industrial/p	rocessor)	
1.	Colour (Characteristic true to variety)Scale (1 to 100) Visual 100% is true to variety colour	More than 70	40-70	Less than 40

### 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample.



#### 220. MAKHANA SEED

Common name: Fox nut, Gorgon nut, raw makhana

Botanical name: Euryale FeroxSalisb.

#### Makhana seed shall be:-

- (i). clean, wholesome and having a hard seed coat which is black in color;
- (ii). have characteristic and aromatic flavour with sharp and sweet pleasant aroma;
- (iii). free from rancid taste and musty odour;
- (iv). free from obnoxious smell and fungal infestation;(v). free from filth, rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

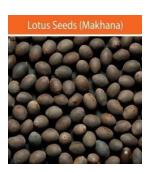
S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary				
1.	Foreign matter (% by wt.) max	0.2	0.5	1.0	
2.	Damaged and discolored seeds (% by wt.) max	2.0	3.0	5.0	
3.	Insect damaged seeds (% by wt.) max	0.25	0.5	1.0	
4.	Size (Diameter of seed in mm)	More than 13	8-13	Less than 8	
В	Optional (Industrial/processor)				
1.	Total ash (% by wt.) max	0.5	1.0	1.5	
2.	Crude fibre(% by wt.) max	1.0			
3.	Protein (% by wt.) min	7.0			

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.

### 6. Definitions:

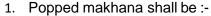
- (i). Foreign matter includes husk, straws, weed seeds, other vegetable matters of the plant, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii). Damaged and discoloured seedsmeans whole or broken, obviously or internally damaged due toheat, microbes, moisture or weather or other causes.
- (iii). Insect damaged seeds mean seeds that are partially or wholly bored or damaged by insects.



### 221. POPPED MAKHANA

Common name: Fox nut, Gorgon nut, raw makhana

Botanical name: Euryale FeroxSalisb.



- (i). clean, wholesome and of white or cream color.
- (ii). have characteristic and aromatic flavour with sharp and sweet, pleasant aroma;
- (iii). free from rancid taste and musty odour;
- (iv). free from obnoxious smell and fungal infestation.
- (v). free from filth, rodent hair and excreta
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary				
1.	Moisture (% by wt.) max	10.0	11.0	12.0	
2.	Foreign matter (% by wt.) max	0.2	0.5	1.0	
3.	Damaged and discolored (% by wt.) max	2.0	3.0	5.0	
4.	Insect damaged (% by wt.) max	0.25	0.5	1.0	
5.	Diameter (mm)	More than 15	10-15	Less than 10	
6.	Color	Creamy white with natural reddish spot	Creamy white with more no. of reddish spots	Creamy white with more no. of reddish spots	
7.	Shape	Fully expanded	Fully expanded	Flattened and irregular	
В	Optional (Industrial/processor)				
1.	Total ash (% by wt.) max	0.5 1.0		1.5	
2.	Crude fibre(% by wt.) max	1.0			
3.	Protein (% by wt.) min	9.0			

### 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.

### 6. Definitions:

- (i). Foreign matter includes husk, straws, weed seeds, other vegetable matters of the plant, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii). Damaged and discolored means roasted makhana whole or broken, obviously or internally damaged due to heat, microbes, moisture or weather or other causes.
- (iii). Insect damaged means roasted makhana that are partially or wholly bored or damaged by insects. **Optional parameters are voluntary and may be analyzed as per buyer-seller agreement.**



### 222. DRIED TULSI LEAVES

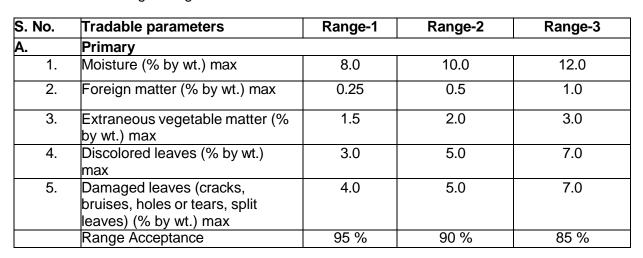
Common name: Holy basil, Tulsi

Botanical name: Ocimum tenuiflorum, Ocimum sanctum Linn

Dried Tulsi leaves shall be: -

(i). Dried leaves of the species *Ocimum tenuiflorum*, *Ocimum sanctum Linn*;

- (ii). Light green to greenish brown in color;
- (iii). Have characteristic colour, odour and flavour;
- (iv). Free from visible molds, living/dead insects, rodent contamination, insect fragments and insect infestation;
- (v). Free from foreign odors, flavors and mustiness.
- 1. Variety (to be filled by assayer) Rama tulsi, Krishna tulsi, Vana tulsi etc.
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation



## 4. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.

### 5. Definitions:

- (i). Foreign matter includes any visible objectionable matter or material not usually associated with the natural components of the plant such as sticks, stones, burlap bagging, metal etc.
- (ii). Extraneous vegetable matter includes vegetative matter associated with the plant from which the product originates, but is not accepted as part of the final product.



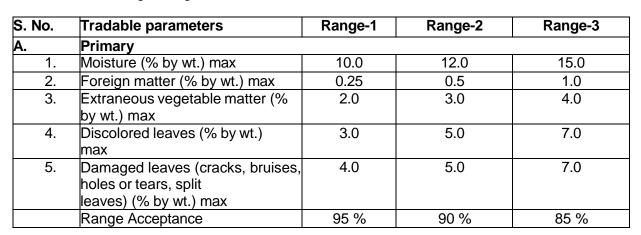
### 223. DRIED FENUGREEK LEAVES

Common name: Kasuri Methi

Botanical name: Trigonella foenum-graecum

Dried fenugreek leaves shall be: -

- (i). Dried leaves of fenugreek plant Trigonella foenum-graecum;
- (ii). green to greenish brown in color;
- (iii). have characteristic flavour and aroma with slight bitter taste;
- (iv). free from visible molds, living/dead insects, rodent contamination, insect fragments and insect infestation;
- (v). free from foreign odors, flavors and mustiness.
- 1. Variety (to be filled by assayer)
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation



## 4. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.

### 5. Definitions:

(i). Foreign matter includes any visible objectionable matter or material not usually associated with the natural components of the plant such as sticks, stones, burlap

Option a parameters are voluntary and may be analyzed as per buyer-seller agreement.

(ii). Extraneous vegetable matter includes vegetative matter associated with the plant from which the product originates, but is not accepted as part of the final product.



### 224. ASAFOETIDA

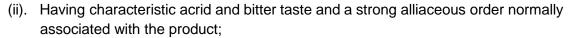
Common name: Hing

Botanical name: Ferula assa-foetida, Ferula alliaces, Ferula rubricaulis

and other species of Ferula

Asafoetida shall be: -

(i). The oleo-gum resin obtained from rhizome and roots of several species of Ferula;



- (iii). free from any colophony resin, galbonum resin, ammoniaccum resin or any other foreign resin;
- (iv). free from coaltar dyes and mineral pigments and any other foreign matter;
- (v). free from foreign odour, insect and fungal infestation and rodent contamination.
- 1. Variety (to be filled by assayer)
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3		
A.	Primary					
1.	Total ash (% by wt.) max	10.0	12.0	15.0		
2.	Acid insoluble ash (% by wt.) max	1.5	2.0	2.5		
3.	Alcoholic extract (with 90% alcohol) minimum	15.0	13.0	12.0		
4.	Starch (% by mass) max	1.0	1.0	1.0		
	Range Acceptance	95 %	90 %	85 %		

# 4. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.



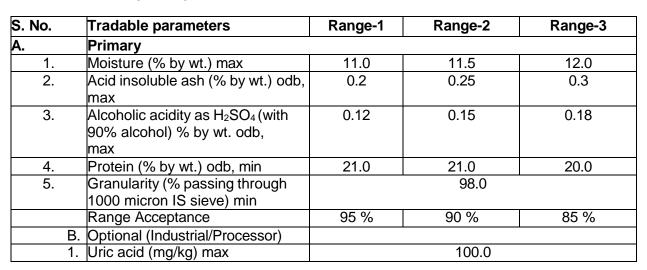
### **225. BESAN**

Common name: Besan

Botanical name: product obtained by grinding dehusked Bengal gram

(Cicer arietinum)
Besan shall be: -

- (i). yellowish in colour and possess characteristic taste and smell;
- (ii). free from contamination with Khesari dal, peas, maize flour and added starch;
- (iii). free from added colouring matter;
- (iv). free from abnormal flavour, odour, insect and fungal infestation and rodent contamination.
- 1. Variety (to be filled by assayer)
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation



## 4. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.



### 226. WHEAT FLOUR

Common name: Gehu ka atta

Botanical name: product obtained by milling or grinding wheat grains

(*Triticum aestivum*) Wheat flour shall be: -

- (i). Whitish to light brown in colour having characteristic taste and flavour;
- (ii). free from rancidity, grittiness, insect or fungus infestation;
- (iii). free from fermented, musty or any other objectionable odour;
- (iv). free from filth (impurities of animal origin) such as rodent hair and excreta, live and dead insects, insect fragments, moulds and fungus.



- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary				
1.	Moisture (% by wt.) max	12.0	13.0	14.0	
2.	Total ash (% by wt.) odb, max		2.0		
3.	Acid insoluble ash (% by wt.) odb, max	0.10	0.12	0.15	
4.	Alcoholic acidity as H <sub>2</sub> SO <sub>4</sub> (with 90% alcohol) % by wt. odb,max	0.12	0.15	0.18	
5.	Gluten (% by wt.) odb min	9.0	7.0	6.0	
6.	Granularity (% passing through 500 micron IS sieve) min	98.0			
	Range Acceptance	95 %	90 %	85 %	
E	B. Optional (Industrial/Processor)			•	
1	. Crude fibre (% by wt.) odb, max	2.5			
2	. Uric acid (mg/kg) max	100.0			

# 4. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.



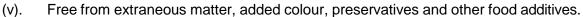
### 227. CHANA SATTU

Common name: Roasted Bengal gram flour, chana sattu

Botanical name: product obtained by milling or grinding roasted Bengal gram (*Cicer arietinum*)

Chana sattu shall be: -

- (i). Uniform in colour having characteristic taste, smell and flavour associated with the product;
- (ii). free from rancidity, insect or fungus infestation;
- (iii). free from fermented, musty or any other objectionable odour;
- (iv). free from filth (impurities of animal origin) such as rodent hair and excreta, live and dead insects, insect fragments, moulds and fungus.



- 1. Variety (to be filled by assayer)
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	No. Tradable parameters		. Tradable parameters Range-1 Ra		Range-2	Range-3
۹.	Primary	·	•			
1.	Moisture (% by wt.) max	7.0	8.0	8.0		
2.	Acid insoluble ash (% by wt.) odb,	0.20	0.40	0.50		
	max					
3.	Alcoholic acidity as H <sub>2</sub> SO <sub>4</sub> (with	0.10	0.12	0.15		
	90% alcohol) % by wt. odb,max					
4.	4. Protein (% by wt.) odb min		21.0	20.0		
5.	Granularity (% passing through		98.0			
	1000 micron IS sieve) min					
	Range Acceptance	95 %	90 %	85 %		
E	B. Optional (Industrial/Processor)					
1	1. Crude fibre (% by wt.) odb, max	3.0				
	2. Uric acid (mg/kg) max		100.0			

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.



### 228. WATER CHESTNUT FLOUR

Common name: Singhare ka atta

Botanical name: product obtained by grinding clean, sound and dried nuts of *Trapa bispinosa* or *Trapa quadrispinosa* species commonly known as Singhara.

Water chestnut flour (Singhare ka atta) shall be: -

- (i). White to creamy white in colour having characteristic taste and flavour;
- (ii). free from rancid and objectionable taste and odour;
- (iii). free from extraneous matter and filth (impurities of animal origin) such as rodent hair and excreta, live and dead insects, insect fragments, moulds and fungus;
- (iv). free from any added color and flavor.
  - 1. Variety (to be filled by assayer)
  - 2. Actual picture of the lot (to be uploaded by assayer).
  - 3. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.		Primary		
1.	Moisture (% by wt.) max	10.0	12.0	12.0
2.	Acid insoluble ash (% by wt.) odb, max	0.30	0.50	0.50
3.	Alcoholic acidity as H <sub>2</sub> SO <sub>4</sub> (with 90% alcohol) % by wt. odb,max	0.10	0.15	0.18
4.	Granularity (% passing through 500 micron IS sieve) min	98.0	97.0	96.0
	Range Acceptance	95 %	90 %	85 %
B.	Optional (Industrial/Processor)			
1.	Uric acid (mg/kg) max		100.0	

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 gm shall be drawn from primary sample called as Laboratory sample.



## 229. WATER CHESTNUT

Common name: Singhara, water caltrop, Paniphal

Botanical name: Trapa natans, Trapa bispinosa or Trapa quadrispinosa

Water chestnut shall be: -

- (i) intact; however, slight superficial cracks are not considered as a defect, provided the kernel is physically protected;
- (ii) firm, sound, clean and fresh in appearance;
- (iii) sufficiently developed and display satisfactory maturity and or ripeness;
- (iv) practically free from pests and damage caused by pests affecting the flesh;
- (v) free from shriveling or drying out and external visible sprouting;
- (vi) free from any foreign smell and/or taste.
- 1. Variety (to be filled by assayer)
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.		Primary			
1.	Size, weight (in gm)	18-20	15-18	10-15	
2.	Defects (% by count) max Skin defects such as cracks, cuts, blemishes (0.5-2.0 sq cm of total surface area)	3	7	10	
3.	Defects (% by count) max Moldy and insect damaged nuts	3	5	7	
4.	Defects (% by count) max Discolored nuts	2	4	6	
5.	Ease of peeling	Easy	Moderate	Difficult	
	Range Acceptance	95 %	90 %	85 %	
B.	Optional (Industrial/Processor)				
1.	Color (Characteristic true to variety) Scale (1 to 100) Visual 100% is true to variety color	More than 80	60-70	Less than 60	

## 4. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 gm shall be drawn from primary sample called as Laboratory sample.



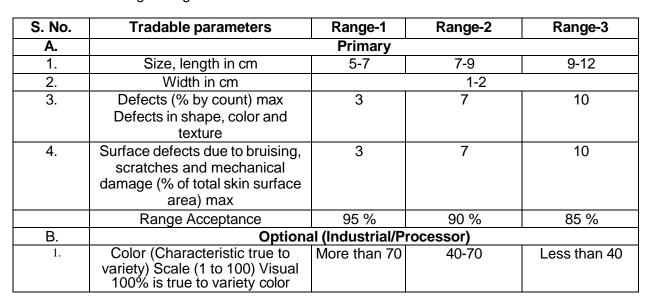
### 230. BABY CORN

Common name: Young corn, cornlettes, mini corn, baby sweetcorn

Botanical name: Zea mays

Baby corn shall be: -

- (i) Whole, sound, clean and fresh in appearance;
- (ii) Practically free of husk, stalk and silk;
- (iii) creamish in colour and free from zig-zag pattern;
- (iv) practically free from pests and damage caused by pests;
- (v) free from any foreign smell and/or taste.
- 1. Variety (to be filled by assayer)
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation



- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.



### 231. DRAGON FRUIT

Common name: Pitaya, Pitahaya, Cactus fruit, strawberry

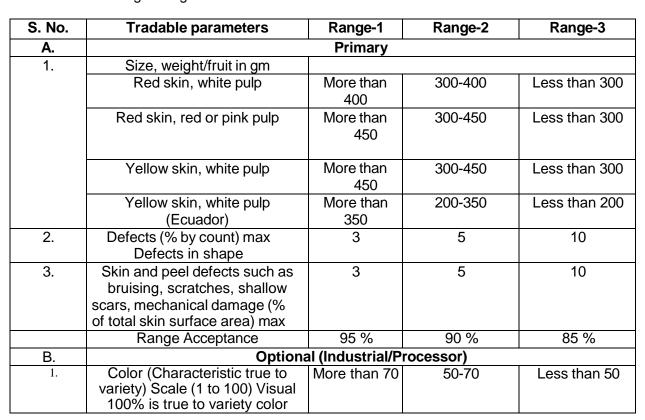
pear, Kamalam

Botanical name: Selenicereus undatus, Selenicereus

megalanthus, Selenicereus polyrhizus

Dragon fruit shall be: -

- (i) Whole, sound, firm, clean and fresh in appearance;
- (ii) Free of splitting or cracks affecting the flesh quality;
- (iii) practically free from pests and damage caused by pests;
- (iv) free from any foreign smell and/or taste.
- 1. Variety (to be filled by assayer)
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation



- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 5 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 5 nos. shall be drawn from primary sample called as Laboratory sample.



#### 232. SUGARCANE

Common name: Ganna, Eikh,

Botanical name: Saccharum officinarum

## Stalks shall be: -

- (i) Ranging in color from green to purple-red to red to almost black.
- (ii) feel hard and give a "knocking" sound when tapped.
- (iii) have a moist and radiant skin tone.
- (v) The quality is considered high when the internode length is long, the diameter is suitable, the sweetness (sugar content) is high, and the pulp is tender and juicy.



- 1. Variety (to be filled by assayer):
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable Parameters	Range 1	Range 2	Range 3	
	A Primary				
1.	Fiber percent of cane %	Less than 12	12-15	More than 15	
2.	pH of cane juice	More than 5.4	4.5-5.4	Less than 4.5	
3.	Brix of cane juice (Total	More than 20	16-20	Less than 16	
	dissolved solids %)				
4.	Polarization (Pol.) in cane	More than 15	13-15	Less than 13	
	juice %				
5.	Purity of cane juice %	More than 85	80-85	Less than 80	
6.	Moisture content of cane %	More than 70	65-70	Less than 65	
7.	Reducing sugar in cane	Less than 0.5	0.5-1.0	More than 1.0	
	juice %				

- (i) 20 kg stalks shall be randomly selected for sampling
- (ii) 10 kg stalks shall be drawn from each selected lot called as primary sample
- (iii) 5 kg stalks shall be drawn from primary sample called as Laboratory sample

### 233. MARCHA RICE

Common Name: Marcha Chawal, Mircha, Marchaiya

Botanical Name: Oryza sativa L.

These tradable parameters shall be applicable only to rice registered as Marcha rice under GI tag and grown in Mainatar, Gaunaha, Narkatiyaganj, Ramnagar, Chanpatiya and Lauriya blocks of West Champaran district of Bihar.

#### Raw Rice shall be:

- (i) White in color, short grained with size and shape similar to black pepper;
- (ii) dry, clean, sound, uniform in colour and size of grains;
- (iii) aromatic with marked degree of natural fragrance characteristic to the variety;
- (iv) free from obnoxious smell and fungal infestation
- 1. Variety: Marcha
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable parameters		Maxi	mum Limit (%)
		Range-1	Range-2	Range-3
A.	P	rimary		•
1.	Moisture Content (% by wt)	12.0	13.0	14.0
2.	Foreign matter (% by wt)	0.4	0.5	0.6
3.	Broken, Damaged, Discolored, Chalky grains (% by wt)	8.5	13.0	17.0
4.	Red/Green grains/Paddy Grain (% by wt)	5.0	7.0	9.0
5.	Other Varieties of Rice (% by wt)	3.0	5.0	8.0
6.	Length (mm)	4.0 to 4.5		4.0 to 4.5
7.	L:B Ratio			1.6 to 1.75
8.	Breadth (mm)	2.3 to 2.5		2.3 to 2.5
9.	Grain Shape	Oval, short and bold		
В	Optional (Ind	ustrial/prod	cessor)	
1.	1000 grain weight (g)		16-22	)

## 4. Sampling:

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

### 5. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other variety of rice means the presence of a variety other than the one under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Broken grains means pieces of sound kernels that are less than three fourths of the size of full kernels.
- (v) Chalky Grains are pieces of kernels of which at least three quarters of the surface is opaque, milky white in colour and brittle in nature.
- (vi) Red grains shall be the kernels, whole or broken which have 25% or more of their surface coated with red bran. Green grains shall be the kernels, whole or broken which are greenish in color.



### 234. KATARNI RICE

Common name: Katarni Chawal Botanical name: Oryza sativa L.

These tradable parameters shall be applicable only to rice registered as Katarni rice under GI tag and grown in three districts located under agroclimatic Zone IIIA in South Bihar which is comprised of south alluvial Gangetic plane of Munger, Banka and South Bhagalpur.



## Raw Rice shall be: -

- (i) clean, sound, medium slender grain, reasonably uniform in size, shape and colour;
- (ii) aromatic with popcorn like flavor;
- (iii) free from obnoxious smell and fungal infestation;
- (iv) shape of the apex of paddy should be slightly curved (similar to tip of the awl)
- 1. Variety: Katarni
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable parameters		Maximum Limit (%)	
		Range-1	Range-2	Range-3
A.		Primary		
1.	Moisture Content (% by wt)	12.0	13.0	14.0
2.	Foreign matter (% by wt)	0.4	0.5	0.6
3.	Broken, Damaged, Discolored, Chalky grains (% by wt)	8.5	13.0	17.0
4.	Red/Green grains/Paddy Grain (% by wt)	5.0	7.0	9.0
5.	Other Varieties of Rice (% by wt)	3.0	5.0	8.0
6.	Length (mm)	4.55 to 4.75		55 to 4.75
7.	L:B Ratio		2.	60 to 2.70
8.	Aroma			gly scented
В	Option	al (Industrial/pro	ocessor)	
1.	Average cooked rice length (mm)		Not mo	ore than 9.8
2.	Average volume expansion ratio		Not mo	ore than 7.0
3.	Average pre-cooked milled rice breadth (mm)	Not more than 1.80		
4.	Elongation ratio after cooking	1.80 to 2.00		
5.	Alkali spreading value			3.8 to 4.0
6.	Amylose content (%)		22 to 24	

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 250 gm shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 250 gm shall be drawn from primary sample called as Laboratory sample.

### 5. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Other variety of rice means the presence of a variety other than the one under consideration;
- (iii) Damaged Grains means grains that are sprouted or internally damaged as a result of heat, microbe, moisture or weather and mechanical injury.
- (iv) Broken grains means pieces of sound kernels that are less than three fourths of the size of full kernels.
- (v) Chalky Grains are pieces of kernels of which at least three quarters of the surface is opaque, milky white in colour and brittle in nature.
- (vi) Red grains shall be the kernels, whole or broken which have 25% or more of their surface coated with red bran. Green grains shall be the kernels, whole or broken which are greenish in color.

## 235. ZARDALU MANGO

Common name: Zardalu Aam Botanical name: Mangifera indica

These tradable parameters shall be applicable only to mango registered as Bhagalpuri Zardalu under GI tag and grown in Bhagalpur and adjoining regions of Banka and Munger districts of Bihar.

Zardalu mango shall be: -

- (i) Fully grown, firm, olive green to creamy yellow in color, clean and fresh in appearance;
- (ii) Practically free from pests and damage caused by pests;
- (iii) Harvested with stalk
- 1. Variety: Zardalu
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

## A. Primary

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
1.	Fruit Weight (gm)	180 and above	130-180	Less than 130
2.	Pulp Color	Deep Yellow	Light Yellow	Dull Yellow
3.	Deshaped fruits (% by count) (Shape true to the variety)	less than 5%	5-10%	5-10%
4.	TSS of ripe fruit (degree brix)	More than 18	15-18	Less than15
5.	Latex injury	Affecting 5-20% of surface area		No limit
	Range Acceptance	95%	90%	85%

# B. Optional

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
1.	Bruised marks	5-10% surface area	10-20% surface	No limit
			arca	
2.	Shriveled	Not allowed	Slight shriveled	No limit
3.	Discoloration	Not allowed	Slight	No limit
			discoloration	
4.	Watery patches	Not allowed	20-30% surface area	No limit
5.	Pressure damage	Not allowed	10-20% surface	No limit
			area	
6.	Mechanical damage	≤ 2 sq. cm	2-4 sq. cm	No limit
		surface area	surface area	

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 10 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (ili) 10 nos. shall be drawn from primary sample called as Laboratory sample.



### 236. SHAHI LITCHI

Common name: Shahi litchi, lichi, lychee

Botanical name: Litchi chinensis

These tradable parameters shall be applicable only to litchi registered as Shahi litchi under GI tag grown in Muzaffarpur, Samastipur, Vaishali, East Champaran and Begusarai area in agro-climatic Zone I of Bihar.

#### Litchi fruit shall be: -

- (i). Fully red, intact, firm, firmly attached to the stalk, clean and fresh in appearance;
- (ii). Free from splitting or cracks affecting the cosmetic quality;
- (iii). practically free from pests and damage caused by pests;
- (iv). free from any off-odor.
- 1. Variety: Shahi Litchi
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Prima	ary	
1.	Appearance	Whole, fresh, clean, firm and free from pests, blemishes and mechanical damage	Shriveled, desiccated fruits are not allowed	Shriveled and desiccated fruits may be allowed
2.	Deshaped fruits (% by count) (Ideal shape Round, oval or heart shaped)	less than 5	5-10	More than 10
3.	Undersized fruits (% by count) Ideal size Diameter- 25 to 35 mm, Length-2.5-4 cm	5-10	10-15	15-25
4.	Loose berries (% by count) max	2	4	6
5.	Weight of fruit (gm)	20 and above	15-20	Less than 15
6.	Color	Red	Red	Red
7.	Ripening stage	Fully Red	Fully Red	Fully Red
8.	% of Pulp	75% and above	50-75%	Less than 50%
9.	TSS (degree brix)	17-20	12-17	Less than 12
10.	Pericarp browning/peel discoloration (% by count) max	5	10	More than10% allowed
	Range Acceptance	95%	90%	85%

- (i) 5% or minimum one container shall be randomly selected for sampling.
- (ii) 10 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.



## 237. MAGAHI PAAN LEAF

Common name: Magahi Paan Botanical name: Piper betle

These tradable parameters shall be applicable only to the betel leaf registered as Magahi paan under GI tag and grown in agro-climate Zone IIIB of Bihar particularly in the Magadh region (in villages of four districts-Aurangabad, Gaya, Nawada and Nalanda).



## Betel leaves shall be: -

- (i). Fully grown, dark green to olive green in color, clean and fresh in appearance;
- (ii). Pungent, fibreless, and soft;
- (iii). Free from physical damage affecting the cosmetic quality;
- (iv). Practically free from pests and damage caused by pests;
- (v). Harvested with stalk
- 1. Variety: Magahi
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Primary		
1.	Leaf Size (Length in cm)	12-15	9-12	7-9
2.	Defects % by count (Max):- cracks/holes/tears/bruises (0.1 to 0.3 mm of total surface area)	5	10	15
3.	Appearance of leaf			
	(i). Unprocessed paan	Dark Green Glossy	Olive Green glossy	Light green Dull
	(ii). Processed paan	Light green Dull	Olive Green glossy	Dark Green Glossy
	Range Acceptance	95%	90%	85%
	B. Optional	(Industrial/Proce	essor)	
1.	Color (%) (Characteristic of variety) Scale (1 to 100) /Visual (*100% is true to variety color)	More than 70	40-70	Less than 40
2.	Shelf life of leaf	10 days and more	10 days and more	Less than 10 days
3.	Disease incidence	0%	5-10%	More than 10 %

## 4. Sampling:

- i) 5% or minimum one container shall be randomly selected for sampling.
- ii) 10 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.

## 238. BANARAS PAAN LEAF

Common name: Banaras Paan Botanical name: Piper betle

These tradable parameters shall be applicable only to the betel leaf registered as Banaras paan under GI tag and grown in Jaunpur, Chandauli, Balliah, Ghazipur, Azamgarh, Varanasi, Mirzapur, Sonbhadra in the state of Uttar Pradesh.

Betel leaves shall be: -

- (i). Fully grown, yellowish green to dark green in color, clean and fresh in appearance;
- (ii). Pungent, fibreless, and soft;
- (iii). Free from physical damage affecting the cosmetic quality;
- (iv). Practically free from pests and damage caused by pests;
- (v). Harvested with stalk
- 1. Variety: Banarasi
- 2. Actual picture of the lot (to be uploaded by assayer).
- 3. Criteria for range designation

S. No.	Tradable Parameters	Range-1	Range-2	Range-3
A.		Prima	ary	
1.	Leaf Size (Length in cm)	12-15	9-12	7-9
2.	Defects % by count (Max):- cracks/holes/tears/bruises (0.1 to 0.3 mm of total surface area)	5	10	15
3.	Appearance of leaf			
	(i). Unprocessed paan	Dark Green Glossy	Olive Green glossy	Light green/Yellowish green Dull
	(ii). Processed paan	Light green/Yellowish green Dull	Olive Green glossy	Dark Green Glossy
	Range Acceptance	95%	90%	85%
	В. (	Optional (Industrial/I	Processor)	
1.	Color (%) (Characteristic of variety) Scale (1 to 100) /Visual (*100% is true to variety color)	More than 70	40-70	Less than 40
2.	Shelf life of leaf	10 days and more	10 days and more	Less than 10 days
3.	Disease incidence	0%	5-10%	More than 10 %

- i) 5% or minimum one container shall be randomly selected for sampling.
- ii) 10 nos. shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 10 nos. shall be drawn from primary sample called as Laboratory sample.



### 239.GREEN TEA

Common name: Hari Chai/Pachai Tea/ग्रीन टी/हरी चाय Botanical name: *Camellia sinensis(L) O. Kuntze* 

Green Tea means the product derived solely and exclusively, and produced by acceptable processes, notably enzyme inactivation, rolling or comminution and drying, from the leaves, buds and tender stems of varieties of the species Camellia sinensis (L) O. Kuntze.



### 1. Green Tea shall be:-

- (i). uniform in size, shape, and color, with a characteristic blackish green for green tea.
- (ii). exhibit characteristic flavor and aroma, be free from unpleasant odors, mustiness, or taint.
- (iii) free from artificial coloring, polishing agents, artificial fragrances, and any other adulterants.
- (iv).clean and free from contaminants like insect parts, molds, and rodent hair and excreta. It should be free from extraneous matters and harmful substances.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

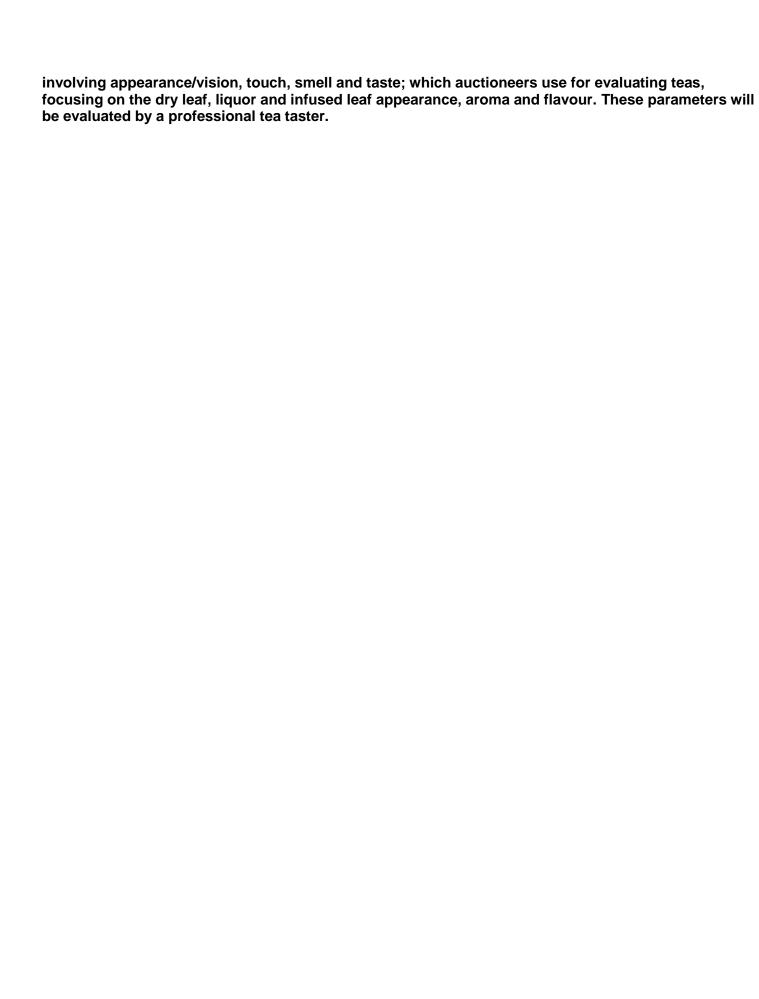
S. No.	Tradable parameters	Range
Α	Regulatory parameters for tea	
1.	Total ash (% by wt.)	4.0 - 8.0
2.	Water Soluble Ash, of total ash (% by wt.), min	45.0
3.	Water-extract (% by wt.), min	32
4.	Alkalinity of water-soluble ash (as KOH), of total ash (% by wt.)	1.0-3.0
5.	Acid-insoluble ash (% by wt.) max	1.0
6.	Crude fibre (% by wt.) max.	16.5
7.	Total catechins (% by wt.)	Not less than 9 and not more than 19.0

### 5.Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample.

## Note:

- 1. Testing of tea samples as per Food Safety and Standards (Food Products standards and food additives) Regulations, 2011 and Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011 should be made mandatory.
- 2. Tea" needs to be evaluated in totality through a complete organoleptic and sensory experience



#### 240.TEA

Common name: Tea/ चाय

Botanical name: Camellia sinensis (L) O. Kuntze

Tea means tea other than Kangra tea obtained by acceptable processes, exclusively from the leaves, buds and tender stems of plant of the Camellia sinensis (L) O. Kuntze

# 1. Tea shall be:-

- (i). uniform in size, shape, and color, with a characteristic brown hue for black tea.
- (ii). exhibit characteristic flavor and aroma, be free from unpleasant odors, mustiness, or taint.
- (iii) free from artificial coloring, polishing agents, artificial fragrances, and any other adulterants.
- (iv).clean and free from contaminants like insect parts, molds, and rodent hair and excreta. It should be free from extraneous matters and harmful substances.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range
Α	Regulatory parameters for tea	
1.	Total ash (% by wt.)	4.0 - 8.0
2.	Water Soluble Ash, of total ash (% by wt.), min	45.0
3.	Water-extract (% by wt.), min	32
4.	Alkalinity of water-soluble ash (as KOH), of total ash (% by wt.)	1.0-3.0
5.	Iron Fillings (mg/Kg)	Not more than 250
6.	Acid-insoluble ash (% by wt.) max	1.0
7.	Crude fibre (% by wt.) max.	16.5

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 100 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 100 g shall be drawn from primary sample called as Laboratory sample.



#### Note:

- Testing of tea samples as per Food Safety and Standards (Food Products standards and food additives)
  Regulations, 2011 and Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011
  should be made mandatory.
- 2. Tea" needs to be evaluated in totality through a complete organoleptic and sensory experience involving appearance/vision, touch, smell and taste; which auctioneers use for evaluating teas, focusing on the dry leaf, liquor and infused leaf appearance, aroma and flavour. These parameters will be evaluated by a professional tea taster.
- 3. "Flavoured Tea":-Tea may contain "natural flavours" and "natural flavouring substances" which are flavour preparations and single substance respectively, acceptable for human consumption, obtained exclusively by physical processes from materials of plants origin either in their natural state or after processing for human consumption in packaged tea only. Tea containing added flavour shall bear proper label declaration as provided in regulation 2.4.5 (23) of Food Safety and Standards (Packaging and Labelling) Regulations, 2011. Tea used in the manufacture of flavoured tea shall conform to the standards of tea.

### 241. ASWAGANDHA DRY ROOTS

Common name: Aswagandha

Botanical name: Withania somnifera (L.) Dunal

Aswagandha Root is the dried mature roots of Withania somnifera (L) Dunal.

- 1. Aswagandha Dry Roots shall be:-
- (i) whole, well formed, and mature roots;
- (ii) free from any foul or musty smell;
- (iii) slightly bitter in taste.
- 2. Variety (to be filled by assayer): jA-20, Poshita, CIM-Pushti, RVA 100 JA 134, Arka Ashwagandha
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.	Primary			
1.	Moisture Content (% by wt.), max.		10	
2.	Foreign material twigs/bark/soil/leaves etc. (% by w.t)		Less than 1	
3.	Dry root surface colour	Creamish	Light Brown	Dark Brown
4.	Root brittleness	Brittle	Break with even fracture	Break with an uneven fracture
5.	Root size	7-10 cm Length with diameter between 1.5- 3.5 cm	('Tukdi') upto 5cm length with diameter less than 1.0 cm	('Taar') semisolid or hollow small root pieces with less than 0.5 cm diameter
B.	Optional			3
1.	Root total withanolide content (%) on dry weight basis	High (>0.70)	Moderate (0.30- 0.70)	Low (<0.3)
2.	Root withanolide-A content     (%) on dry weight basis	High (>0.65)	Moderate (0.28- 0.65)	Low (<0.28)
3.	Root polysaccharide content (%)	High (>25)	Moderate (15- 25)	Low (<15)
4.	Root fiber content (%)	Low (<12.5)	Moderate (12.5-20)	High (>20)

## 5. **Sampling**:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 g shall be drawn from primary sample called as Laboratory sample.

Optional parameters are voluntary and may be analyzed as per buyer-seller agreement.



### 242.MUSTARD OIL

Common name: Sarson ka tel

Botanical name: Mustard Oil shall be obtained by a process of expression from clean and sound mustard seed of *Brassica campestris Linn* (yellow and Brown sarson) or *Brassica junecea Linn* (Lahi, Rai or laha) or *Brassica napus* (rapeseed or toria) or admixture of these seeds.



### 1. Mustard Oil shall:-

- (i) have characteristic and acceptable taste and flavor and colour characteristic to the variety.
- (ii) be clear and free from turbidity when a filtered sample of oil is kept for 24 hours at 30°C;
- (iii) be free from rancidity, obnoxious smell, suspended or insoluble matter or any other foreign matter;
- (iv) be free from separated water, sedimentation, added colouring matter and any other flavouring substances;
- (v) be free from synthetic oil.

**Note:** Producer can declare oil as cold pressed or Kachhi Ghani based on achieving prescribed natural Allyl isothiocyanate content and following the process of mechanical expression.

- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
A.	Primary			
1.	Moisture and insoluble impurities (% by wt) max	0.10 0.25		
2.	Refractive index at 40°C	1.4646 to 1.4662		
3.	Percentage of Natural Essential Oil Content as Allyl isothiocyanate, (Minimum)	0.20	0.15	0.10
4.	Specific Gravity at 30° C/30°C	0.907 to 0.910		
5.	Colour in I-inch cell on the Lovibond scale, expressed as Y +5R, not deeper than	50		
6.	Test for adulteration by mixing of other oils	Negative		
В	Optional (Industrial/processor)			
1.	lodine value	96-112		
2.	Saponification value	169-177		
3.	Unsaponifiable matter Not more than (% wt)	1.2		
4.	Acid value, max	2.0	4.0	6.0
5.	Belliers Turbidity Temperature Ever's acetic acid Method °C		23.0-27.5	

### 5.Sampling:

- (iv) 5 % or minimum one container shall be randomly selected for sampling.
- (v) 500 ml shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (vi) 500 ml shall be drawn from primary sample called as Laboratory sample.

### 243.LAVENDER OIL

Common name:

Botanical name: Lavandula angustifolia oil

Lavender oil is obtained by steam distillation of the recently cut flowering tops of Lavandula angustifolia Mill., spontaneous or cultivated, of the Lamiaceae family.



- 1. Lavender Oil shall be:-
- (i) clear liquid with strong aroma, free from sediment, suspended matter, separated water and adulterants;
- (ii) colorless to pale yellow in color;
- (iii) characteristic fresh floral recalling the odour of the flowering tops of the plant.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
1.	Lenalylacetate (ester) content %	>50	35-50	30-35
2.	Cineole content %	>3	2-3	<2
3.	Linalool content %	30-40 20-30		
4.	Relative Density at 20 °C	0.880-0.892		
5.	Refractive Index at 20 °C	1.455-1.466		
6.	Miscibility in ethanol at 75 % (volume fraction), at 20 °C max	2 volumes of ethanol at 75 % (volume fraction)		
7.	Optical rotation	Between – 11.5° and − 7°		
8.	Acid value, max	1.2		

## 5. Sampling:

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 25 ml shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 25 ml shall be drawn from primary sample called as Laboratory sample.

Parameters may be chosen and analysed as per buyer-seller agreement.

### 244.MENTHA OIL

Common name: मेंथा तेल/Mentha Oil/Mint/Japanese

Mint/Menthol Oil/ Corn Mint Botanical name: *Mentha arvensis L* 

Mentha oil shall be obtained by hydro steam/steam distillation of the fresh overg portion of the whole plant of Mentha arvensis L., fam. labiatae.

- 1. Mentha Oil shall be:-
- (i) clear liquid with strong minty aroma, free from sediment, suspended matter, separated water and adulterants:
- (ii) Light/ pale yellow in color;
- (iii) having strong, cooling and refreshing minty smell with slightly bitter taste
- 2. Variety (to be filled by assayer): CIM-Kosi, CIM-Kranti, CIM-Unnati
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
1.	Refractive Index, 27 °C	1.456 to 1.4642		
2.	Specific Gravity, 27 °C	0.811 3 to 0.9123		
3.	Total Menthol Content (%)	>65	60-65	<60
4.	Solubility in ethanol (volume fraction), at 20 °C max	Soluble (1:4 to 6 Volume in 70% alcohol)		
5.	Optical rotation	−35° to −45°		
6.	Acid value, max	1		
7.	Esters, as menthyl acetate (molecular mass 198.28) (% by wt.)	3 to 15		

## 5. Sampling:

- (iv) 5 % or minimum one container shall be randomly selected for sampling.
- (v) 25 ml shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (vi) 25 ml shall be drawn from primary sample called as Laboratory sample.

Parameters may be chosen and analysed as per buyer-seller agreement.



### 245.VIRGIN OLIVE OIL

Common name: Jaitun Tel/जैतून तेल Botanical name: Olea europaea L. oil

Virgin olive oils are the oils obtained from the fruit of the olive tree solely by mechanical or other physical means under conditions, particularly thermal conditions, that do not lead to alterations in the oil and which have not undergone any treatment other than washing, decanting, centrifuging and filtration.



- 1. Olive oil shall be:-
- (i) having characteristic odor, rich texture and taste;
- (ii) free from rancidity, suspended or other foreign matter, separated water, added coloring or flavoring substances or mineral oil.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
1.	Moisture and volatile matter (% by wt.) max	0.2		
2.	Insoluble impurities (% by wt.) max	0.1		
3.	Refractive Index at 20°C		1.4677-1.4705	
4.	lodine value	75-94		
5.	Colour	light yellow to green	light yellow to green	light yellow
6.	free acidity (FFA), expressed as oleic acid, max	0.8 g per 100 g	2 g per 100 g	3.3 g per 100 g
7.	Test for adulteration by mixing of other oils	Negative		
8.	Unsaponifiable matter (Max)	15 g/kg		
9.	Absorbency in ultra-violet at 270 nm (max)	≤0.22	≤0.25	≤0.30
10.	Saponification value (mg KOH/g oil)		184-196	

#### 5. Sampling:

- (iv) 5 % or minimum one container shall be randomly selected for sampling.
- (v) 200 ml shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (vi) 200 ml shall be drawn from primary sample called as Laboratory sample.

Parameters may be chosen and analysed as per buyer-seller agreement.

### 246.LAVENDER DRIED FLOWER

Common name: Lavender dry flower/ Lavender/ True

lavender

Botanical name: Lavendula angustifolia Mill

Dried Lavender is the flower buds (calyxes), or stems (bundles) that have been harvested and preserved by drying.

1. Lavender dry flower shall be:-

(i) Free from foreign material spikes/bark/soil etc.;

(ii) The dried flowers should be stored in air tight high density polyethylene containers or fibre board drums with polyethylene lining.



2. Variety (to be filled by assayer):

3. Actual picture of the lot (to be uploaded by assayer).

4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3	
A.	Primary				
1.	Dried flower colour	Dark lavender blue	Admixture of lavender blue and golden	Yellowish or golden	
2.	Moisture Content	<10%	10-12%	12% max	
3.	Aroma Intensity	Strong and characteristic	Moderate	Weak or lacking fragrance	
В	Optional (Industrial/processor)				
1.	Essential Oil Content	>1.5%	1.0-1.5%	<1.0%	
2.	Purity (absence of foreign matter)	>95%	90-95%	<90%	

- (i) Select the lot (total quantity intended for sampling) and ensure the lot is homogeneous. If it is not, divide it into sub-lots based on identifiable characteristics (e.g., size, source, or packaging).
- (ii) Randomly select a specified number of bags or containers from the lot. For bulk quantities, draw samples from multiple locations (e.g., top, middle, and bottom of the stack) to account for variability.
- (iii) Collect at least 50 g-100 g from each selected unit (bag, container, or bulk area.
- (iv) Combine all collected portions into a single clean container and mix thoroughly to ensure a homogeneous primary sample.

### 247.BROKEN RICE

Common name: Broken Rice/ Tute Chawal/ Kinki

Botanical name: Oryza sativa L.

Broken Rice includes pieces of rice kernels which are less than three fourth of a kernel. Rice will be classified as "broken rice" only if at least 90% of the sample consists of such broken pieces'



- 1. Broken Rice shall be: -
- (i) white to creamy-white in color;
- (ii) possess marked degrees of natural fragrance, characteristic of the variety both in raw and cooked forms;
- (iii) be free from artificial coloring, polishing agents, artificial fragrances and any other chemicals;
- (iv) be free from filth (impurities of animal origin) such as rodent hair and excreta, live and dead insects, insect fragments, moulds and fungus;
- (v) be free from any musty obnoxious odor.
- 2. Variety (to be filled by assayer)
- 3. Actual picture of the lot (to be uploaded by assayer).
- 4. Criteria for range designation

S. No.	Tradable parameters	Range-1	Range-2	Range-3
Α.	Primary			•
1.	Moisture content (% wt), max	12	13	14
2.	Foreign matter (% by wt) Max	0.6	0.8	1.0
3.	Damaged/Chalky grains (% by wt) Max	4.0	6.0	8.0
4.	Red /Green grains/Paddy Grains (% by wt) Max	2.0	3.0	4.0
В	Optional (Industrial/processor	·)	•	•
1.	Amylose content Dry mass basis (%)	20-25		
2.	Alkali spreading value (ASV)	4.0-7.0		
3.	Uric acid (mg per kg),max	100		

- (i) 5 % or minimum one container shall be randomly selected for sampling.
- (ii) 500 g shall be drawn from each selected container and shall be mixed homogenously, called as primary sample.
- (iii) 500 g shall be drawn from primary sample called as Laboratory sample.

#### 6. Definitions:

- (i) Foreign matter includes husk, straws, weed seeds, other inedible grains, metallic pieces, sand, gravel, dirt, pebbles, stones, lumps of earth, clay, mud and animal filth etc.
- (ii) Damaged, discoloured grains include rice kernels, broken fragments of whole kernels that are internally damaged or discoloured (including black grains), materially affecting the quality
- (iii) Chalky Grains are pieces of kernels of which at least half the portion is opaque, milky white in color and brittle in nature.
- (iv) Red grains shall be the kernels, whole or broken which have their surface coated with red bran.
- (v) Green grains shall be the kernels, whole or broken which are greenish in color.
- (vi) Paddy grains mean the kernels whole or broken, with husk.

