JUNAGADH AGRICULTURAL UNIVERSITY, JUNAGADH

A. Oilseed Crops

Sr. No.	Varieties / hybrids	
1.	Groundnut	
	1.1 Gujarat Groundnut 8 (GG 8)	
	1.2 Gujarat Groundnut 16 (GG 16)	
	1.3 Gujarat Junagadh Groundnut-HPS-1 (GJG-HPS-1)	
	1.4 Gujarat Junagadh Groundnut 9 (GJG 9)	
	1.5 Gujarat Junagadh Groundnut 31 (GJG 31)	
	1.6 Gujarat Junagadh Groundnut 17 (GJG 17)	
	1.7 Gujarat Junagadh Groundnut 22 (GJG 22)	
	1.8 Gujarat Junagadh Groundnut 18 (GJG 18)	
	1.9 Gujarat Junagadh Groundnut 19 (GJG 19)	
	1.10 Gujarat Junagadh Groundnut 32 (GJG 32)	
	1.11 Gujarat Junagadh Groundnut 33 (GJG 33)	
	1.12 Gujarat Groundnut-HPS-2 (GG-HPS-2)	
	1.13 Gujarat Groundnut 41 (GG 41)	
	14 Gujarat Groundnut 23 (GG 23) (Sorath Kiran)	
	1.15 Gujarat Groundnut 35 (GG 35) (Sorath Gold)	
2.	Castor	
	2.1 Gujarat Castor 3 (GC 3)	
	2.2 Gujarat Castor Hybrid 9 (GCH 9)	
3.	Sesame	
	3.1 Gujarat Til 3 (G. Til 3)	
	3.2 Gujarat Til 4 (G. Til 4)	
	3.3 Gujarat Junagadh Til 5 (GJT 5)	
	3.4 Gujarat Til 6 (GT 6)	
4.	Soybean	
	4.1 Gujarat Junagadh Soybean 3 (GJ Soy 3)	

1. Groundnut:

1.1 Gujarat Groundnut 8 (GG 8)-Spanish Bunch

	ujarat Groundhut o (GG o)-Spanis	
1	Name of crop	Groundnut
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Groundnut 8 (GG 8)
4	Parentage with details of its	27-5-1 x JL-24
	pedigree	(30-3-2-B-B)
5	Breeding method	Hybridization followed by pedigree method of selection
6	Year of release	2004-05
7	Gazette notification	S. O. 1572 (E) & Date: 20.09.2006
8	Acknowledge particulars about	IC: 538571
	the submission of germplasm	
	samples with NBPGR	
9	Potential pod yield (kg/ha)	3056
10	Average pod yield (kg/ha)	1716
11	Recommended regions/ areas of	Zone-III (Timely sown in rainfed areas of Northern
	adoption	Maharashtra and Madhya Pradesh).
12	Characteristics/ Distinguishing mo	rphological in brief:
•	Plant height (cm)	40.40
•	Main stem growth habit	Erect (bunch)
•	Side branch growth habit	Sparse
		*

•	No. of branches per plant	4.9
•	No. of pods per plant	20
•	100 pods weight (g)	98.7
•	100 kernel weight (g)	35.0
•	Kernel yield (kg/ha)	1193
•	Haulm yield (kg/ha)	3860
•	Shelling out turn (%)	69.0
•	Oil content (%)	46
•	Oil yield (kg/ha)	579
•	SMK (%)	88
•	Leaflet shape	Oblong
•	Leaflet size	Medium
•	Leaflet colour	Medium green
•	Flowering pattern	Sequential
•	Pod size	Medium
•	Pod constriction	Slight
•	Pod reticulation	Slight
•	No. of kernels/pod	Two seeded
•	Pod prominence of beak	Absent
•	Pod shape of beak	Absent
•	Kernel size	Medium
•	Kernel shape	Round
•	Kernel colour	Rose
•	Seed dormancy	Absent
13	Agronomical Practices	Condition of sowing: Rainfed
		• Sowing distance: 45 x 10 cm
		• Seed rate: 100 kg/ha
		• Fertilizers: N:P:K: 37.5 : 75.0 : 0.0 kg/ha
14	Specific attributes/ identifiable	Its leaflets are medium size with medium green colour.
	characteristics of the variety	Pods are smooth (no reticulation) without constriction.
15	Quality / Nutritional / Other features	It has higher shelling out-turn (69.0 %).
16	Diseases and pests resistance	It has comparatively lower incidence of bud necrosis,
	(give details of any resistance to	collar rot and root rot diseases. The variety is more or
	pest or diseases including races)	less equivalent in jassids and leaf miner reactions. For
17	Dunation / Maturity angua	thrips it is slightly superior.
17	Duration/ Maturity group	106 (104-107) days/Medium maturity group.
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat)







1.2 Gujarat Groundnut 16 (GG 16) - Spreading

1	Name of crop	Groundnut

2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Groundnut 16 (GG 16)
4	Parentage with details of its	J , , , ,
_	pedigree	(S-94-15-B-10-1-B-B)
5	Breeding method	Hybridization followed by pedigree method of
		selection.
6	Year of release	2004-05
7	Gazette notification	S. O. 1572 (E) & Date: 20.09.2006
8	Acknowledge particulars about	IC: 538572
	the submission of germplasm	
	samples with NBPGR	
9	Potential pod yield (kg/ha)	5435
10	Average pod yield (kg/ha)	2058
11	Recommended regions/areas of	
	adoption	Karnataka and Southern Maharashtra in cultivation
10	Characteristics/Distinction	rainfed condition).
12	Characteristics/ Distinguishing mo	rphological in brief: 35.70
•	Plant height (cm) Main stam growth habit	Erect
•	Main stem growth habit	
•	Side branch growth habit	Tip moderately upturned
•	No. of branches per plant	6.9
•	No. of pods per plant	28
•	100 pods weight (g)	115
•	100 kernel weight (g)	43.00
•	Kernel yield (kg/ha)	1338
•	Haulm yield (kg/ha)	3708
•	Shelling out turn (%)	63.00
•	Oil content (%)	46.00
•	Oil yield (kg/ha)	615
•	SMK (%)	83
•	Plant growth habit	Prostrate
•	Leaflet size	Medium
•	Leaflet colour	Green
•	Flowering pattern	Alternate
•	Pod size	Big
•	Pod constriction	Moderate
•	Pod texture or surface	Prominent
•	No. of kernels/pod	2 seeded
•	Pod prominence of beak	Moderate
•	Pod shape of beak	Slight
•	Kernel size	Medium
•	Kernel shape	Elongated
•	Kernel colour	Rose
•	Seed dormancy	About 60-90 days
13	Agronomical Practices	Condition of sowing: Rainfed
		• Sowing distance: 45 x 15 cm
		• Seed rate: 100 kg/ha
		• Fertilizers: N:P:K: 37.5:112.5:37.5 kg/ha
14	Specific attributes/ identifiable	Its plant is erect with profuse branching. Leaflets are
	characteristics of the variety	medium in size and green coloured. Pods have moderate
		constriction and prominent pod beak.

15	Quality / Nutritional / Other	It has higher 100-kernel weight.
	features	
16	Diseases and pests resistance (give details of any resistance to pest or diseases including races)	It is superior against bud necrosis and root rot diseases, while it shows more or less similar reaction to rust, tikka, stem rot and collar rot diseases as compare to check varieties. The variety is comparable to thrips, jassids and prodenia damage as compare to check
		varieties.
17	Duration/ Maturity group	119 (115-121) days/Medium maturity group
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)



1.3 Gujarat Junagadh Groundnut-HPS-1 (GJG-HPS-1)-Virginia runner (Spreading)

2 Botanical name Arachis hypogaea L. 3 Name of variety Gujarat Junagadh Groundnut-HPS-1 (GJG-HPS-1) 4 Parentage with details of its pedigree (JVR-HPS-422) 5 Breeding method Hybridization followed by pedigree method of selection 6 Year of release 2007-08 7 Gazette notification S. O. 2137 (E) & Date: 31.08.2010 8 Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption General cultivation in the groundnut growing rainfed areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Plant prowth habit Decumbent 2	1	Name of crop	Groundnut
4 Parentage with details of its pedigree (JVR-HPS-422) 5 Breeding method Hybridization followed by pedigree method of selection 6 Year of release 2007-08 7 Gazette notification S. O. 2137 (E) & Date: 31.08.2010 8 Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 9.75 • Plant habit type Virginia runner (Spreading)	2	Botanical name	
pedigree (JVR-HPS-422) 5 Breeding method Hybridization followed by pedigree method of selection 6 Year of release 2007-08 7 Gazette notification S. O. 2137 (E) & Date: 31.08.2010 8 Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Potential pod yield (kg/ha) 2125 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Sugar content (%) 9.75 • Plant habit type Virginia runner (Spreading)	3	Name of variety	
5 Breeding method	4	Parentage with details of its	JSP 21 x VG 5
6 Year of release 2007-08 7 Gazette notification S. O. 2137 (E) & Date: 31.08.2010 8 Acknowledge particulars about the submission of germplasm samples with NBPGR IC: 573466 9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption General cultivation in the groundnut growing rainfed areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 9.75 • Plant habit type Virginia runner (Spreading)			,
7 Gazette notification S. O. 2137 (E) & Date: 31.08.2010 8 Acknowledge particulars about the submission of germplasm samples with NBPGR IC: 573466 9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption General cultivation in the groundnut growing rainfed areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Sugar content (%) 9.75 • Plant habit type Virginia runner (Spreading)			
8 Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption General cultivation in the groundnut growing rainfed areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 9.75 • Plant habit type Virginia runner (Spreading)	6		2007-08
the submission of germplasm samples with NBPGR 9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Sugar content (%) 9.75 • Plant habit type Virginia runner (Spreading)		Gazette notification	
samples with NBPGR 9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Sugar content (%) 9.75 • Plant habit type Virginia runner (Spreading)	8		IC: 573466
9 Potential pod yield (kg/ha) 2960 10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption General cultivation in the groundnut growing rainfed areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Sugar content (%) 9.75 • Plant habit type Virginia runner (Spreading)			
10 Average pod yield (kg/ha) 2125 11 Recommended regions/areas of adoption 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 9.75 • Plant habit type Virginia runner (Spreading)			
Recommended regions/areas of adoption General cultivation in the groundnut growing rainfed areas of the Saurashtra and South Gujarat	-		
adoption areas of the Saurashtra and South Gujarat 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Sugar content (%) 9.75 • Plant habit type Virginia runner (Spreading)	-		
12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 33.00 • No. of branches per plant 5.8 • No. of pods per plant 23.3 • 100 pods weight (g) 149.4 • 100 kernel weight (g) 55.85 • Kernel yield (kg/ha) 1437 • Haulm yield (kg/ha) 3200 • Shelling out turn (%) 67.63 • Oil content (%) 48.85 • Oil yield (kg/ha) 702 • Protein content (%) 29.24 • Sugar content (%) 9.75 • Plant habit type Virginia runner (Spreading)	11		
 Plant height (cm) No. of branches per plant No. of pods per plant 100 pods weight (g) 149.4 100 kernel weight (g) Kernel yield (kg/ha) Haulm yield (kg/ha) Shelling out turn (%) Oil content (%) Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 		±	J
 No. of branches per plant No. of pods per plant 100 pods weight (g) 149.4 100 kernel weight (g) Kernel yield (kg/ha) Haulm yield (kg/ha) Shelling out turn (%) Oil content (%) Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 	12	5 5	
 No. of pods per plant 100 pods weight (g) 149.4 100 kernel weight (g) Kernel yield (kg/ha) Haulm yield (kg/ha) Shelling out turn (%) Oil content (%) Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type 	•		
 100 pods weight (g) 149.4 100 kernel weight (g) 55.85 Kernel yield (kg/ha) Haulm yield (kg/ha) Shelling out turn (%) Oil content (%) Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 	•		
 100 kernel weight (g) Kernel yield (kg/ha) Haulm yield (kg/ha) Shelling out turn (%) Oil content (%) Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type 55.85 437 437 463 47.63 48.85 Oil yield (kg/ha) 48.85 Virginia runner (Spreading) 	•		
 Kernel yield (kg/ha) Haulm yield (kg/ha) Shelling out turn (%) Oil content (%) Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type Kernel yield (kg/ha) 67.63 48.85 Oil yield (kg/ha) 702 Protein content (%) 9.75 Virginia runner (Spreading) 	•	100 pods weight (g)	149.4
 Haulm yield (kg/ha) Shelling out turn (%) 67.63 Oil content (%) 48.85 Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 	•	100 kernel weight (g)	55.85
 Shelling out turn (%) Oil content (%) 48.85 Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 	•	Kernel yield (kg/ha)	1437
 Shelling out turn (%) Oil content (%) 48.85 Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 	•	Haulm yield (kg/ha)	3200
 Oil yield (kg/ha) Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 	•		67.63
 Protein content (%) Sugar content (%) Plant habit type Virginia runner (Spreading) 	•	Oil content (%)	48.85
 Sugar content (%) Plant habit type Virginia runner (Spreading) 	•	Oil yield (kg/ha)	702
Plant habit type Virginia runner (Spreading)	•	Protein content (%)	29.24
	•	Sugar content (%)	9.75
Plant growth habit	•	Plant habit type	Virginia runner (Spreading)
	•	Plant growth habit	Decumbent 2

•	Leaflet shape	Elliptic
•	Leaflet size	Medium
•	Leaflet colour	Green
•	Flowering pattern	Alternate
•	Flower inflorescence	Simple
•	Pod size	Bold
•	Pod constriction	Slight
•	Pod texture (Reticulation)	Moderate
•	No. of kernels/pod	2-1 seeded
•	Pod : Prominence of beak	Slight
•	Pod: Shape of beak	Present
•	Kernel size	Bold
•	Kernel colour	Rose
•	Seed dormancy	Present
13	Agronomical Practices	Condition of sowing: Rainfed
		• Sowing distance: 60 x 10 cm
		Seed rate: 120 kg/ha
		• Fertilizers: N:P:K: 25.0:50.0:50.0 kg/ha
14	Specific attributes/ identifiable	1. It is a Virginia runner (spreading) type plant.
	characteristics of the variety	2. Leaf shape is elliptic, green in colour and medium leaflet size.
		3. Pod size is bold with slight beak and constriction as
		well as moderate reticulation.
		4. Bold seed size with rosy colour.
15	Quality / Nutritional / Other	It has low oil, high protein and sugar contents
	features	
16	Diseases and pests resistance	The reactions against tikka, rust, stem rot, bud necrosis
	(give details of any resistance to	(PBND) and infestation of thrips of the variety under
	pest or diseases including races)	field conditions are comparable to that of the check
17	Duration / Maturity group	varieties.
18	Duration/ Maturity group Originating source/ Institute	116 (110-120) days/Medium maturity group Main Oilseeds Research Station, Junagadh Agricultural
10	Originating source/ institute	University, Junagadh-362 001 (Gujarat)
		Omversity, Junagaun-302 001 (Oujarat)



1.4 Gujarat Junagadh Groundnut 9 (GJG 9)-Spanish bunch

	111 Gujurur Gunuguun Groundhat > (Go G >) Spanish Sunch		
1	Name of crop	Groundnut	
2	Botanical name	Arachis hypogaea L.	
3	Name of variety	Gujarat Junagadh Groundnut 9 (GJG 9)	
4	Parentage with details of its	GG 5 x ICGV-90116	
	pedigree	(K-98-33-B-20-1-B-B)	
5	Breeding method	Hybridization followed by pedigree method of selection	
6	Year of release	2009-10	
7	Gazette notification	S. O. 1708 (E) & Date: 26.07.2012	
8	Acknowledge particulars about	IC: 583377	

samples with NBPGR 9 Potential yield (kg/ha) 3259 10 Average yield (kg/ha) 1632 11 Recommended regions/areas of adoption groundnut growing areas of the entire Gujarat State. 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 34.00 • No. of branches per plant 4 • No. of pods per plant 12 • 100 pods weight (g) 96.70 • 100 kernel weight (g) 36.89	l t	the submission of germplasm	
9 Potential yield (kg/ha) 3259 10 Average yield (kg/ha) 1632 11 Recommended regions/areas of adoption groundnut growing areas of the entire Gujarat State. 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 34.00 • No. of branches per plant 4 • No. of pods per plant 12 • 100 pods weight (g) 96.70 • 100 kernel weight (g) 36.89			
10 Average yield (kg/ha) 11 Recommended regions/areas of adoption 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) • No. of branches per plant • No. of pods per plant • 100 pods weight (g) • 100 kernel weight (g) 1632 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 12 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 12 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 12 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 13 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 14 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 15 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 16 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 17 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 18 Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 19 Suitable for the cultivation in the <i>kharif</i> rai growing areas of the entire Gujarat State.			3259
11 Recommended regions/areas of adoption Suitable for the cultivation in the <i>kharif</i> rai groundnut growing areas of the entire Gujarat State. 12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 34.00 • No. of branches per plant 4 • No. of pods per plant 12 • 100 pods weight (g) 96.70 • 100 kernel weight (g) 36.89			1632
12 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 34.00 • No. of branches per plant 4 • No. of pods per plant 12 • 100 pods weight (g) 96.70 • 100 kernel weight (g) 36.89	1 I	Recommended regions/areas of	Suitable for the cultivation in the kharif rainfed
 Plant height (cm) 34.00 No. of branches per plant 4 No. of pods per plant 12 100 pods weight (g) 96.70 100 kernel weight (g) 36.89 			groundnut growing areas of the entire Gujarat State.
 No. of branches per plant No. of pods per plant 12 100 pods weight (g) 96.70 100 kernel weight (g) 36.89 			
 No. of pods per plant 100 pods weight (g) 100 kernel weight (g) 36.89 			
 100 pods weight (g) 100 kernel weight (g) 36.89 			
• 100 kernel weight (g) 36.89			12
• Kernel yield (kg/ha) 1183	• 1	100 kernel weight (g)	36.89
		Kernel yield (kg/ha)	1183
• Haulm yield (kg/ha) 2590	• I	Haulm yield (kg/ha)	2590
• Shelling out turn (%) 72.49	• 5	Shelling out turn (%)	72.49
• Oil content (%) 48.17	• (Oil content (%)	48.17
• Oil yield (kg/ha) 570			570
• Protein content (%) 29.33	• I	Protein content (%)	29.33
• Sugar content (%) 10.86	• 5	Sugar content (%)	10.86
Plant habit type Spanish bunch	• I	Plant habit type	Spanish bunch
Plant growth habit	• I	Plant growth habit	Erect
• Leaflet shape Lanceolate	• I	Leaflet shape	Lanceolate
Leaflet size Medium	• I	Leaflet size	Medium
Leaflet colour Light green	• I	Leaflet colour	Light green
• Flowering pattern Sequential	• I	Flowering pattern	Sequential
• Flower inflorescence Multiple	• I	Flower inflorescence	Multiple
Pod size Medium	• I	Pod size	Medium
Pod constriction Shallow	• I	Pod constriction	Shallow
Pod texture (Reticulation) Absent	• I	Pod texture (Reticulation)	Absent
No. of kernels/pod Two seeded	• 1	No. of kernels/pod	Two seeded
Pod prominence of beak Absent	• I	Pod prominence of beak	Absent
Pod shape of beak NA	• I	Pod shape of beak	NA
Kernel size and shape Medium and Spheroidal	• I	Kernel size and shape	Medium and Spheroidal
Kernel colour of testa Rose	• I	Kernel colour of testa	Rose
Seed dormancy Absent	• 5	Seed dormancy	Absent
13 Agronomical Practices • Condition of sowing: Rainfed	3 A	Agronomical Practices	Condition of sowing: Rainfed
Sowing distance: 45 x 10 cm			• Sowing distance: 45 x 10 cm
Seed rate: 100 kg/ha			Seed rate: 100 kg/ha
• Fertilizers: N:P:K: 12.5:25.0:50.0 kg/ha			
		-	The variety has lanceolate leaf shape with light green
	C	characteristics of the variety	colour. It has shallow pod constriction without
reticulation.		Overlier / Nestation 1 / Orl	
		- •	It has recorded higher kernel and oil yield. The variety
features also exhibited greater pod and kernel size. 16 Diseases and pests resistance Tolerant to stem rot and superior for the incidence			Tolerant to stem rot and superior for the incidence and
Diseases and pests resistance Tolerant to stem rot and superior for the incidence (give details of any resistance to damage by jassids and thrips.		<u>=</u>	<u> </u>
pest or diseases including races)		-	damage by Jassius and unips.
17 Duration/ Maturity group 103 days/Medium maturity group			103 days/Medium maturity group
		· · · · · · · · · · · · · · · · · · ·	Main Oilseeds Research Station, Junagadh Agricultural
University, Junagadh-362 001 (Gujarat)		5 5 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	_ = =



1.5 Gujarat Junagadh Groundnut 31 (GJG 31)-Spanish

	ujarat Junagaan Grounanut 31 (G	
1	Name of crop	Groundnut
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Junagadh Groundnut 31 (GJG 31)
4	Parentage with details of its	GG 2 x PBS-21065
	pedigree	(K-98-34-B-3-1-B-B)
5	Breeding method	Hybridization followed by pedigree method of selection
6	Year of release	2009-10
7	Gazette notification	S. O. 1708 (E) & Date: 26.07.2012
8	Acknowledge particulars about	IC: 583379
	the submission of germplasm	
0	samples with NBPGR	5262
9	Potential pod yield (kg/ha)	
10	Average pod yield (kg/ha) Recommended regions/areas of	3483 Suitable for the cultivation in the summer groundnut
11		
12	adoption Characteristics/Distinguishing mor	growing areas of the Gujarat State.
12	Plant height (cm)	18.90
	No. of branches per plant	4.0
•	No. of pods per plant	15.0
	100 pods weight (g)	115.30
	100 kernel weight (g)	40.77
•	Kernel yield (kg/ha)	2460
•	Haulm yield (kg/ha)	6408
•	Shelling out turn (%)	70.62
•	Oil content (%)	49.24
•	Oil yield (kg/ha)	1211
•	Protein content (%)	29.86
•	Sugar content (%)	10.84
•	Plant growth habit	Erect
•	Leaflet shape	Lanceolate
•	Leaflet size	Medium
•	Leaflet colour	Light green
•	Flowering pattern	Sequential
•	Flower inflorescence	Multiple
•	Pod size	Medium
•	Pod constriction	Medium
•	Pod texture (Reticulation)	Medium
•	No. of kernels/pod	Two seeded but occasion three seeded
•	Pod prominence of beak	Medium
•	Pod shape of beak	Straight

•	Kernel size and shape	Medium and Spheroidal
•	Kernel colour of testa	Rose
•	Seed dormancy	Absent
13	Agronomical Practices	Condition of sowing: Irrigated (Summer)
		• Sowing distance: 30 x 10 cm
		Seed rate: 100 kg/ha
		• Fertilizers: N:P:K 12.5:25.0:50.0 kg/ha
14	Specific attributes / identifiable	It has lanceolate leaf shape with light green leaflets. It
	characteristics of the variety	has also recorded higher pod and kernel size.
15	Quality / Nutritional / Other	The variety recorded higher oil, protein and sugar
	features	contents.
16	Diseases and pests resistance	The entry is found free from PBND incidence. It is low
	(give details of any resistance to	incidence and damage by jassids, thrips and heliothis.
	pest or diseases including races)	
17	Duration/ Maturity group	117 days/Medium maturity group
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)







1.6 Gujarat Junagadh Groundnut 17 (GJG 17)-Virginia runner

1	Name of crop	Groundnut
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Junagadh Groundnut 17 (GJG 17)
4	Parentage with details of its	JSSP 11 x GG 6
	pedigree	(K-99-2-B-1-B-B)
5	Breeding method	Hybridization followed by pedigree method of
		selection.
6	Year of release	2010-11
7	Gazette notification	S. O. 312 (E) & Date: 01.02.2013
8	Acknowledge particulars about	IC: 591739
	the submission of germplasm	
	samples with NBPGR	
9	Potential yield (kg/ha)	3191
10	Average yield (kg/ha)	1798
11	Recommended regions/areas of	Suitable for the cultivation in the kharif rainfed
	adoption	groundnut growing areas of the Gujarat State.
12	Characteristics/Distinguishing mor	<u> </u>
•	Plant height (cm)	36.90
•	No. of branches per plant	8
•	No. of pods per plant	18
•	100 pods weight (g)	102.18
•	100 kernel weight (g)	38.31
•	Kernel yield (kg/ha)	1190
•	Haulm yield (kg/ha)	2888

•	Shelling out turn (%)	66.20
•	Oil content (%)	48.51
•	Oil yield (kg/ha)	577
•	Plant habit type	Virginia runner
•	Plant growth habit	Decumbent 2
•	Main stem growth habit	Erect
•	Side branches growth habit	Tip moderately upturn
•	Leaflet shape	Lanceolate
•	Leaflet size	Small
•	Leaflet colour	Green
•	Flowering pattern	Alternate
•	Flower inflorescence	Simple
•	Pod size	Medium
•	Pod constriction	Slight
•	Pod texture (Reticulation)	Medium
•	No. of kernels/pod	2-1
•	Pod prominence of beak	Slight
•	Pod shape of beak	Straight
•	Kernel size and shape	Medium and fusiform
•	Kernel colour of testa	Rose
•	Seed dormancy	Present
13	Agronomical Practices	Condition of sowing: Rainfed and pre-monsoon
		• Sowing distance: 60 x 15 cm
		Seed rate: 120 kg/ha
		• Fertilizers: N:P:K:12.5:25.0:50.0 kg/ha
14	Specific attributes/ identifiable	It has small leaflets with green colour. Pod constriction
	characteristics of the variety	is slight with medium reticulation. It has uniform rose
15	Quality/ Nutritional/ Other	colour kernels.
13	Quality/ Nutritional/ Other features	It has recorded higher kernel and oil yield.
16	Diseases and pests resistance	The reaction against tikka, rust and collar rot is
	(give details of any resistance to	comparable to the check varieties. However, It is
	pest or diseases including races)	tolerant to the stem rot as compare to the check
		varieties. The damage of jasside and thrips is
1.7	7.6	comparable to less.
17	Duration/ Maturity group	121 days/Very late maturity group
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)







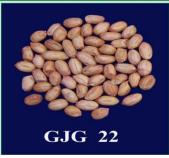
1.7 Gujarat Junagadh Groundnut 22 (GJG 22)-Virginia bunch

1	Name of crop	Groundnut
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Junagadh Groundnut 22 (GJG 22)

4	Parentage with details of its	JSSP 17 x GG 20
	pedigree	(K-00-22-B-4-B-B-B)
5	Breeding method	Hybridization followed by pedigree method of selection
6	Year of release	2010-11
7	Gazette notification	S. O. 312 (E) & Date: 01.02.2013
8	Acknowledge particulars about	IC: 591738
	the submission of germplasm	
	samples with NBPGR	
9	Potential yield (kg/ha)	2726
10	Average yield (kg/ha)	1770
11	Recommended regions/areas of	Suitable for the cultivation in the <i>kharif</i> rainfed
	adoption	groundnut growing areas of the entire Gujarat State.
12	Characteristics/Distinguishing mor	
•	Plant height (cm)	39.30
•	No. of branches per plant	7
•	No. of pods per plant	18
•	100 pods weight (g)	116.10
•	100 kernel weight (g)	44.40
•	Kernel yield (kg/ha)	1282
•	Haulm yield (kg/ha)	2404
•	Shelling out turn (%)	72.45
•	Oil content (%)	51.62
•	Oil yield (kg/ha)	662
•	Plant habit type	Virginia bunch
•	Plant growth habit	Decumbent 3
•	Main stem growth habit	Erect
•	Side branches growth habit	Tip moderately upturn
•	Leaflet shape	Oblong
•	Leaflet size	Medium
•	Leaflet colour	Green
•	Flowering pattern	Alternate
•	Flower inflorescence	Simple
•	Pod size	Medium
	Pod constriction	Slight
	Pod texture (Reticulation)	Medium
•	No. of kernels/pod	2-1
•	Pod prominence of beak	Moderate
•	Pod shape of beak	
•	-	Straight Medium and Spheroidal
•	Kernel size and shape Kernel colour of testa	Medium and Spheroidal
•		Rose
12	Seed dormancy	Present Condition of consists Deinfold
13	Agronomical Practices	• Condition of sowing: Rainfed
		• Sowing distance: 60 x 15 cm
		• Seed rate: 120 kg/ha
1 /	C:C44 1 4 / 11 4 C. 11	• Fertilizers: N:P:K :12.5:25.0:50.0 kg/ha
14	Specific attributes / identifiable	It has oblong shaped leaflets and slightly constricted
1 5	characteristics of the variety	pods.
15	Quality / Nutritional / Other features	It has shelling out-turn and 100-kernel weight is
16		superior to the check varieties. The reaction against tikks, rust and stem rot it is found.
10	Diseases and pests resistance (give details of any resistance to	The reaction against tikka, rust and stem rot it is found comparable whereas, it is found tolerant to collar rot.
	(give details of any resistance to	comparable whereas, it is iound tolerant to condi tot.

	pest or diseases including races)	The damage of jasside and thrips is comparatively less.
17	Duration/ Maturity group	118 days/Late maturity group
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)







1.8 Gujarat Junagadh Groundnut 18 (GJG 18)

	Name of even	
1	Name of crop	Groundnut
3	Botanical name	Arachis hypogaea L.
4	Name of variety	Gujarat Junagadh Groundnut 18 (GJG 18) JSSP 12 x LGN 2
4	Parentage with details of its	
5	pedigree Dragding mathed	(K-99-13-B-1-1-B-B)
3	Breeding method	Hybridization followed by pedigree method of selection
6	Year of release	2014-15
7	Gazette notification	S. O.: 268 (E) & Date:28.01.2015
8	Acknowledge particulars about the	IC: 597594
8	submission of germplasm samples	1C. 391394
	with NBPGR	
9	Potential pod yield (kg/ha)	2175
10	Average pod yield (kg/ha)	1557
11	Recommended regions/areas of	Zone-IV (Timely sown in rainfed <i>kharif</i> areas of
	adoption	Odisha, West Bengal, Jharkhand and Manipur).
12	Characteristics/Distinguishing morph	
•	Plant height (cm)	34.80
•	Plant growth habit	Prostrate
•	Main stem growth habit	Erect
•	Side branch growth habit	Tips moderately upturned
•	100 kernel weight (g)	49.0
•	Kernel yield (Kg/ha)	1078
•	Shelling out turn (%)	69.0
•	Oil content (%)	48.0
•	Oil yield (kg/ha)	517.0
•	SMK (%)	87.0
•	Leaflet size	Medium
•	Leaflet colour	Green
•	Flowering pattern	Alternate
•	Flowering pattern on main stem	No flower on main stem
•	Pod constriction	Shallow
•	Pod texture or surface	Medium
•	No. of kernels/pod	Two seeded
•	Pod prominence of beak	Absent
•	Pod shape of beak	Absent
•	Kernel size	Medium
	<u> </u>	<u> </u>

•	Kernel shape	Cylindrical
•	Kernel colour	Monochrome, Rose
•	Seed dormancy	About 35-45 days
13	Agronomical Practices	Condition of sowing: Rainfed and pre-monsoon
		• Sowing distance: 30 x 10 cm
		• Seed rate:120 kg/ha
		• Fertilizers: N:P:K: 20.0:60.0:40.0 kg/ha
14	Specific attributes / identifiable	It has medium sized leaflets with green coloured. Pods
	characteristics of the variety	are medium sized with shallow constriction and
		medium reticulation. Kernels are medium sized with
		cylindrical shape.
15	Quality / Nutritional / Other	It had higher oil content (48.0 %)
	features	
16	Diseases and pests resistance (give	The reaction against tikka, rust, collar rot and stem rot
	details of any resistance to pest or	the variety is comparable, but it show tolerance
	diseases including races)	against stem rot and dry root rot. Reaction to major
		pests is similar to the check varieties.
17	Duration/ Maturity group	119 days (115-124 days) /Medium maturity group
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh
		Agricultural University Junagadh-362 001 (Gujarat)







1.9 Gujarat Junagadh Groundnut 19 (GJG 19) - Virginia runner (Spreading)

1	Name of crop	Groundnut
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Junagadh Groundnut 19 (GJG 19)
4	Parentage with details of its	JSSP 12 x LGN 2
	pedigree	(K-99-13-B-1-2-B-B)
5	Breeding method	Hybridization followed by pedigree method of
		selection
6	Year of release	2014-15
7	Gazette notification	S. O. 2238(E) & Date: 29.06.2016
8	Acknowledge particulars about the	IC: 610391
	submission of germplasm samples	
	with NBPGR	
9	Potential pod yield (kg/ha)	2792
10	Average pod yield (kg/ha)	1876
11	Recommended regions/areas of	Zone-IV (Timely sown in rainfed kharif areas of
	adoption	Odisha, West Bengal, Jharkhand and Manipur).
12	Characteristics/Distinguishing morph	nological in brief:
•	Plant height (cm)	34.50
•	Plant growth habit	Spreading (Virginia runner)
•	Main branch growth habit	Erect
•	Side branch growth habit	Tips moderately upturned
•	100 kernel weight (g)	50.0
•	Kernel yield (Kg/ha)	1296

•	Shelling out turn (%)	69.0
•	Oil content (%)	47.0
•	Oil yield (kg/ha)	609
•	SMK (%)	89.0
•	Leaflet shape	Obovate
•	Leaflet size	Small
•	Leaflet colour	Green
•	Flowering pattern	Alternate
•	Flowering pattern on main stem	No flower on main stem
•	Pod size	Medium
•	Pod constriction	Shallow
•	Pod reticulation	Medium
•	No. of kernels/pod	Two seeded
•	Pod prominence of beak	Slight
•	Pod shape of beak	Slight
•	Kernel size	Medium
•	Kernel shape	Cylindrical
•	Kernel colour	Monochrome, Rose
•	Seed dormancy	About 35-45 days
13	Agronomical Practices	Condition of sowing: Rainfed
		• Sowing distance: 45 x 15 cm
		• Seed rate: 120-130 kg/ha
14		1
		reticulation.
15	Quality / Nutritional / Other	It has high oil content (47.0 %) and SMK (89.0 %).
	7 77 77 77	
16		
	diseases including races)	
17	Duration/Maturity group	
10	Originating source/ institute	· · · · · · · · · · · · · · · · · · ·
14	Specific attributes / identifiable characteristics of the variety	 Sowing distance: 45 x 15 cm Seed rate: 120-130 kg/ha Fertilizers: N:P:K: 20.0: 60.0: 40.0 kg/ha It has small leaflets with obovate shape. Pods a medium sized with shallow constriction and mediu reticulation.







1.10 Gujarat Junagadh Groundnut 32 (GJG 32)-Erect

			(,
	1	Name of crop	Groundnut
Г	2	Botanical name	Arachis hypogaea L.
Г	3	Name of variety	Gujarat Junagadh Groundnut 32 (GJG 32)
	4	Parentage with details of its pedigree	(F 334 A-B-14 x NCAc 2214) x ICG 2241) x (ICGMS 42 x Kadiri 3) x ICGMS 28 x (F 334A-B-14 x NCAc 2214)] x LI x (Robut 33-1-1-5)
	5	Breeding method	Hybridization followed by pedigree method of selection

6	Year of release	2016-17
7	Gazette notification	S. O. 399 (E), Date: 24.01.2018 for National and
		S. O. 6318 (E), Date: 26.12.2018 for Gujarat State
8	Acknowledge particulars about	IC: 620846
	the submission of germplasm	
	samples with NBPGR	
9	Potential pod yield (kg/ha)	4635
10	Average pod yield (kg/ha)	3392
11	Recommended regions/areas of	General cultivation in the <i>kharif</i> rainfed groundnut
	adoption	growing areas of the Gujarat State and it is also release for Zone-V (Tamilnadu, Andhra Pradesh, Telangana,
		Karnataka and Southern Maharashtra) during 2016.
12	Characteristics/Distinguishing mor	, ,
12	Plant height (cm)	32.65
•	No. of branches per plant	7.95
•	No. of pods per plant	29.50
•	100 pods weight (g)	87.90
•	100 pous weight (g)	35.90
	Plant growth habit	Erect
•	Kernel yield (kg/ha)	2324
•	Haulm yield (kg/ha)	5183
•	Shelling out turn (%)	68.52
•	Oil content (%)	53.90
•	` ´ .	1253
•	Oil yield (kg/ha) Protein content (%)	27.52
•	` ′	1.15
•	Leaflet shape and size Leaflet colour	Oblong elliptic and medium Dark green
•		Sequential Sequential
•	Flowering pattern Flower inflorescence	Compound
•	Pod constriction	Shallow
•	Pod texture (Reticulation)	Medium
•	No. of kernels/pod	2-1 seeded
•	Pod prominence of beak	Medium
•	Pod shape of beak	
•	Kernel size	Straight Small
•		Spheroidal
•	Kernel shape Kernel colour	Rose
•	Seed dormancy	Absent
13		
13	Agronomical Practices	• Condition of sowing: <i>Kharif</i> rainfed
		• Sowing distance: 45 x 10 cm
		• Seed rate: 100 kg/ha • Fertilizers: N.P.K: 12 5:25 0:50 0 kg/ha
14	Specific attributes / identifiable	 Fertilizers: N:P:K: 12.5:25.0:50.0 kg/ha 1. It is a Spanish bunch (erect) type
14	characteristics of the variety	2. Leaf shape is oblong elliptic
	characteristics of the variety	3. Leaflet is medium in size and dark green in colour
		4. Pod size and reticulation are medium, pod beak
		medium and constriction shallow
15	Quality / Nutritional / Other	The variety recorded higher oil and protein contents
	features	
16	Diseases and pests resistance	The reaction against tikka and rust is resistant, whereas,
	(give details of any resistance to	for collar rot and stem rot the variety comparable to the

	pest or diseases including races)	checks. The damage due to leaf defoliators is low, while thrips is comparable against damage due to the check varieties.
17	Duration/ Maturity group	112 days (115-124 days) /Late maturity group
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)







1.11 Gujarat Junagadh Groundnut 33 (GJG 33) - Erect (Spanish bunch)

	•	(GJG 33) - Erect (Spanish bunch)
1	Name of crop	Groundnut
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Junagadh Groundnut 33 (GJG 33)
4	Parentage with details of its	[(ICGV 92069 x ICGV 93184) SIL 4 x (ICGS 44 x
	pedigree	ICGS 76)]
5	Breeding method	Hybridization followed by pedigree method of selection
6	Year of release	2016-17
7	Gazette notification	S. O. 1379 (E), Date: 27.03.2018
8	Acknowledge particulars about	GJG 33 (ICGV 07222) IC: 623505
	the submission of germplasm	
	samples with NBPGR	0.407
9	Potential pod yield (kg/ha)	3495
10	Average pod yield (kg/ha)	3073
11	Recommended regions/areas of	Cultivation in <i>rabi-summer</i> timely sown for Zone IIIb
10	adoption	(Andhra Pradesh, Telangana and Tamil Nadu).
12	Characteristics/Distinguishing mor	
•	Plant height (cm)	18.5
•	Plant growth habit	Erect
•	Side branch growth habit	Tips very strongly upturned
•	Plant branching	Profuse
•	Leaf shape and size	Oblong elliptic and medium
•	Leaflet colour	Dark green
•	Flowering pattern	Sequential
•	Flowering pattern on main stem	Flower on main stem
•	Pod beak and size	Present and Medium
•	Pod constriction	Medium
•	Pod reticulation	Medium
•	Kernel nature	2 seeded
•	Pod prominence of beak	Medium
•	Testa colour	Monochrome, Rose
•	Kernel size	Medium
•	Kernel shape	Spheroidal
•	100 kernel weight (g)	38.0 (Medium)
•	Oil content (%)	51.0 (High)
•	Oil yield (kg/ha)	1041
•	Kernel yield (kg/ha)	2056
<u> </u>	, <i>, , , , , , , , , , , , , , , , , , </i>	

•	Shelling out turn (%)	67 (65-69 Medium)
•	Protein content (%)	26.0
•	SMK (%)	87.0
•	Fresh seed dormancy period	Absent
13	Agronomical Practices	Condition of sowing: First forthnight of January
		• Sowing distance: 30 x 10 cm.
		• Seed rate: 125-130 kg/ha
		• Fertilizers: N:P:K: 25 : 50 : 75 kg/ha
14	Specific attributes / identifiable	1. Plant growth habit 16 spanish bunch (erect) type.
	characteristics of the variety	2. Side branch growth habit is tips very strongly
		upturned.
		3. Leaf shape is oblong elliptic.
		4. Leaflet is medium in size and dark green in colour.
		5. Pod size, and reticulation are medium, pod beak
		medium and pod constriction medium.
15	Quality / Nutritional / Other	The variety is recorded higher oil (51.0 %) and protein
	features	contents (26.0 %).
16	Diseases and pests resistance	The variety highly resistant reaction against <i>Helicoverpa</i>
	(give details of any resistance to	and Spodoptera damage and resistant against the damage
	pest or diseases including races)	of thrips. The variety is resistant against stem rot, collar
		rot, dry root rot, rust, ELS and PBND diseases.
17	Duration/ Maturity group	113 days (95-122 days) /Late maturity group.
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)







1.12 Gujarat Groundnut HPS 2 (GG HPS 2) - Virginia Bunch

1	Name of crop	Groundnut
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Groundnut HPS 2 (GG HPS 2)
4	Parentage with details of its	JVBHPS 2 x GG 20
	pedigree	(S-08-6-B-1-B-B-B)
5	Breeding method	Hybridization followed by pedigree method of selection
6	Year of release	2017-18
7	Gazette notification	S.O. 1498 (E), Dt. 01/04/2019
8	Acknowledge particulars about	GG HPS 2 (JSSP LS 58) IC: 625896
	the submission of germplasm	
	samples with NBPGR	
9	Potential pod yield (kg/ha)	3516
10	Average pod yield (kg/ha)	2835
11	Recommended regions/areas of	Suitable for cultivation in kharif rainfed for Gujarat
	adoption	state.
12	Characteristics/Distinguishing mor	phological in brief:
•	Plant height (cm)	40.66
•	Plant growth habit	Decumbent-3

•	Leaflet shape and size	Oblong and medium
•	Leaflet colour	Dark green
•	Flowering pattern	Alternate
•	Flower inflorescence	Simple
•	Pod size	Large
•	Pod constriction	Shallow
•	Pod reticulation	Medium
•	Kernel nature	2-1 Seeded
•	Pod prominence of beak	Medium
•	Testa colour	Monochrome
•	Kernel size	Large
•	Kernel shape	Cylindrical
•	100 kernel weight (g)	66.71 (Very high)
•	Oil content (%)	48.82
	Oil yield (kg/ha)	950
•	Kernel yield (kg/ha)	1945
•	Shelling out turn (%)	68.61
•	Protein content (%)	24.46
•	SMK (%)	92.60
•	Fresh seed dormancy period	Present
13	Agronomical Practices	• Condition of sowing: <i>Kharif</i> rainfed
		• Sowing distance: 60 x 15 cm.
		• Seed rate: 120 kg/ha
		• Fertilizers: N:P:K: 25 : 50 : 50 kg/ha
14	Specific attributes / identifiable	1. It is a Virginia bunch (Semi-spreading) type.
	characteristics of the variety	2. Leaf shape is oblong and leaflet is dark green in colour.
		3. The pod size is large. The reticulation and prominence
		of pod beak are medium; while constriction is
		shallow.
		4. Kernel shape is cylindrical.
15	Quality / Nutritional / Other	This variety can be considered as confectionery type as
	features	it possessed comparatively low oil content and large
		seed size (count 43) than the check varieties.
16	Diseases and pests resistance	The variety is more resistant against tikka and rust
	(give details of any resistance to	disease as compared to the check varieties.
17	pest or diseases including races) Duration/Meturity group	121 days /Lata maturity aroun
	Duration/ Maturity group Originating source/ Institute	121 days /Late maturity group.
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural University, Junagadh-362 001 (Gujarat)
		omvorsity, Junagadii-302 001 (Oujarat)







1.13 Gujarat Groundnut 41 (GG 41) - Virginia runner (Spreading)

1 Name of crop Groundnut 2 Botanical name Arachis hypogaea L. 3 Name of variety Gujarat Groundnut 41 (GG 41) 4 Parentage with details of its pedigree (K-08-2-H-8-37-B-B-B) 5 Breeding method Hybridization followed by pedigree method of selection 6 Year of release 2018-19 6 Acknowledge particulars about the submission of germplasm samples with NBPGR 8 Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Average pod yield (kg/ha) 2722 10 Recommended regions/areas of adoption areas of the Gujarat State 11 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 34.27 • Plant growth habit Decumbent-2 • Main stem growth habit Decumbent-2 • Main stem growth habit Tip moderately upturn • Leaflet shape and size Oblong elliptic and Medium • Leaflet colour Dark Green • Flower inflorescence Simple • Pod size Medium • Pod constriction Medium • Pod reticulation Medium • Pod reticulation Medium • Pod reticulation Medium • Pod reticulation Medium • Remel size Medium • Pod prominence of beak Medium • Remel size Medium Medium • Remel size Medium Medium Medium • Remel size Medium	1.13 (Gujarat Groundnut 41 (GG 41) - V	
3 Name of variety	1	1	
4 Parentage with details of its pedigree 5 Breeding method Hybridization followed by pedigree method of selection 6 Year of release 2018-19 7 Gazette notification Awaited 8 Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Average pod yield (kg/ha) 2722 10 Recommended regions/areas of adoption areas of the Gujarat State 11 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 34.27 • Plant growth habit Decumbent-2 • Main stem growth habit Erect • Side branch growth habit Tip moderately upturn • Leaflet shape and size Oblong elliptic and Medium • Leaflet shape and size Oblong elliptic and Medium • Leaflet colour Dark Green • Flower inflorescence Simple • Pod size Medium • Pod restruction Medium • Remel nature 2-1 Seeded • Pod prominence of beak Medium • Remel size Medium • Remel size Medium • Kernel size Medium • Remel vield (kg/ha) 1034 • Kernel size Medium • Remel size Medium			
pedigree (K-08-24-B-37-B-B-B) Breeding method Hybridization followed by pedigree method of selection Year of release 2018-19 Gazette notification Acknowledge particulars about the submission of germplasm samples with NBPGR Average pod yield (kg/ha) Average pod yield (kg/ha) Average pod yield (kg/ha) Characteristics/Distinguishing morphological in brief: Plant fleight (cm) Asia stem growth habit Plant growth habit Leaflet shape and size Blood size Plowering pattern Flower inflorescence Plod reticulation Pod reticulation Pod reticulation Remel shape Kernel shape Kernel shape Kernel shape Shelling out turn (%) Shelling out turn (%) Shelling out turn (%) Shelling out turn (%) Specific attributes/ identifiable characteristics of the variety Breeding method Hybridization followed by pedigree method of selection Awaited GG41 (JSP 65) IC 628557 GG41 (JSP 65) IC 628557 GG41 (JSP 65) IC 628557 GG41 (JSP 65) IC 62855	3	·	
Seeding method Hybridization followed by pedigree method of selection	4	C	
6 Year of release 2018-19 7 Gazette notification Awaited 8 Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Average pod yield (kg/ha) 2722 10 Recommended regions/areas of adoption adoption adoption 11 Characteristics/Distinguishing morphological in brief: Plant height (cm) 34.27 Plant growth habit Decumbent-2 Main stem growth habit Freet Side branch growth habit Tip moderately upturn Leaflet shape and size Oblong elliptic and Medium Leaflet shape and size Oblong elliptic and Medium Leaflet shape and size Oblong elliptic and Medium Plowering pattern Alternate Flower inflorescence Simple Pod constriction Medium Pod reticulation Medium Rernel nature 2-1 Seeded Pod prominence of beak Medium Rernel size Medium Shelling out turn (%) 54.44 (High) Oil yield (kg/ha) 1034 Rernel shape Condition of sowing: Kharif rainfed Shelling out turn (%) 73.84 Rernel yield (kg/ha) 1034 Rernel saccteristics of the variety Present Specific attributes/ identifiable characteristics of the variety Present 13 Specific attributes/ identifiable characteristics of the variety Present 14 Diseases and pests resistance Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and		1 0	
Acknowledge particulars about the submission of germplasms samples with NBPGR 2722			
Acknowledge particulars about the submission of germplasm samples with NBPGR 9 Average pod yield (kg/ha) 10 Recommended regions/areas of adoption 11 Characteristics/Distinguishing morphological in brief: Plant height (cm) Plant prowth habit Plant growth habit Erect Side branch growth habit Leaflet shape and size Oblong elliptic and Medium Leaflet colour Pod vering pattern Flower inflorescence Pod size Pod prominence of beak Remel size Medium Pod prominence of beak Remel size Medium Testa colour Monochrome, Rose Kernel size Kernel shape Oil content (%) Shelling out turn (%) Specific attributes/ identifiable characteristics of the variety Diseases and pests resistance Pod size is comparable to the checks against tikka and			
the submission of germplasm samples with NBPGR 9 Average pod yield (kg/ha) 2722 10 Recommended regions/areas of adoption areas of the Gujarat State of General cultivation in the kharif groundnut growing areas of the Gujarat State • Plant height (cm) 34.27 • Plant growth habit Decumbent-2 • Main stem growth habit Tip moderately upturn • Leaflet shape and size Oblong elliptic and Medium • Leaflet colour Dark Green • Flowering pattern Alternate • Flower inflorescence Simple • Pod size Medium • Pod constriction Medium • Rernel nature 2-1 Seeded • Pod prominence of beak Medium • Kernel nature 2-1 Seeded • Pod prominence of beak Medium • Kernel size Medium • Kernel size Medium • Kernel shape Cylindrical • Oil content (%) 51.44 (High) Oil yield (kg/ha) 1034 • Kernel yield (kg/ha) 2010 • Shelling out turn (%) 73.84 • Protein content (%) 95.12 • Fresh seed dormancy period Present 13 Specific attributes/ identifiable characteristics of the variety 14 Diseases and pests resistance Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and			
samples with NBPGR Average pod yield (kg/ha) 2722 10 Recommended regions/areas of adoption General cultivation in the kharif groundnut growing areas of the Gujarat State 11 Characteristics/Distinguishing morphological in brief: Plant height (cm) 34.27 • Plant height (cm) 34.27 • Plant prowth habit Decumbent-2 • Main stem growth habit Erect Tip moderately upturn • Leaflet shape and size Oblong elliptic and Medium • Leaflet colour Dark Green Alternate • Flowering pattern Alternate • Flowering pattern Alternate • Flowering pattern Alternate • Pod size Medium • Pod constriction Medium • Pod reticulation Medium • Pod reticulation Medium • Rernel nature 2-1 Seeded • Pod prominence of beak Medium • Rernel size Medium • Rernel size Medium • Rernel shape Cylindrical • Iolo kernel weight (g) 56.48 (High) • Oil content (%) 51.44 (High) • Oil vield (kg/ha) 2010 • Shelling out turn (%) 73.84 • Protein content (%) 23.56 • SMK (%) 95.12 • Presh seed dormancy period Present 12 Agronomical Practices Present 13 Specific attributes/ identifiable characteristics of the variety Attributes/ identifiable characteristics of the variety 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 1 In its a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and	8		GG 41 (JSP 65) IC 628557
9 Average pod yield (kg/ha) 10 Recommended regions/areas of adoption Recommended regions/areas of adoption 11 Characteristics/Distinguishing morphological in brief: 9 Plant height (cm) 9 Plant growth habit 12 Erect 13 Side branch growth habit 15 Leaflet shape and size 16 Dark Green 17 Plowering pattern 18 Plowering pattern 19 Pod size 19 Pod constriction 19 Pod reticulation 10 Remel state colour 10 Pod prominence of beak 10 Remel size 10 Remel size 10 Medium 10 Remel size 10 Remel wight (g) 10 Scale High) 10 Remel wight (g) 10 Scale High) 10 Shelling out turm (%) 10 Shelling out turm (%) 10 Shelling out turm (%) 12 Agronomical Practices 10 Specific attributes/ identifiable characteristics of the variety 10 Diseases and pests resistance 10 Variety is comparable to the checks against tikka and			
Recommended regions/areas of adoption General cultivation in the kharif groundnut growing areas of the Gujarat State	9		2722
adoption areas of the Gujarat State 11 Characteristics/Distinguishing morphological in brief: • Plant height (cm) 34.27 • Plant growth habit Decumbent-2 • Main stem growth habit Tip moderately upturn • Leaflet shape and size Oblong elliptic and Medium • Leaflet colour Dark Green • Flowering pattern Alternate • Flower inflorescence Simple • Pod size Medium • Pod constriction Medium • Pod constriction Medium • Pod prominence of beak Medium • Kernel nature 2-1 Seeded • Pod prominence of beak Medium • Kernel size Medium • Kernel size Medium • Kernel size Medium • Kernel siyeld (kg/ha) 56.48 (High) • Oil content (%) 51.44 (High) • Oil content (%) 73.84 • Protein content (%) 23.56 • SMK (%) 95.12 • Fresh seed dormancy period Present 12 Agronomical Practices • Condition of sowing: Kharif rainfed • Sowing distance: 60 x 15 cm • Seed rate (Kernel): 120 kg/ha • Freilizers: 12.50-25.00-50.00 kg N - P ₂ O ₃ - K ₂ O/ha 13 Specific attributes/ identifiable characteristics of the variety Colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium, while constriction is medium. 4. Kernel shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium, while constriction is medium. 4. Kernel shape is oblong elliptic and teaflet is dark green in colour.			
Characteristics/Distinguishing morphological in brief: Plant height (cm) 34.27 Plant growth habit Decumbent-2 Main stem growth habit Erect Side branch growth habit Tip moderately upturn Leaflet shape and size Oblong elliptic and Medium Leaflet colour Dark Green Flowering pattern Alternate Flower inflorescence Simple Pod size Medium Pod constriction Medium Pod reticulation Medium Rernel nature 2-1 Seeded Pod prominence of beak Medium Vernel size Medium Kernel size Medium Testa colour Monochrome, Rose Kernel shape Cylindrical Seend shape Cylindrical Oil content (%) 51.44 (High) Oil yield (kg/ha) 1034 Kernel yield (kg/ha) 2010 Shelling out turn (%) 73.84 Protein content (%) 23.56 SMK (%) 95.12 Fresh seed dormancy period Present Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fretilizers: 12.50-25.00-50.00 kg N - P ₂ O ₅ - K ₂ O/ha In is a Virginia runner (spreading) type. Leaflet shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is oblong alignate tikka and	10	9	, , ,
 Plant height (cm) Plant growth habit Decumbent-2 Main stem growth habit Side branch growth habit Leaflet shape and size Oblong elliptic and Medium Leaflet colour Flowering pattern Pod size Pod size Pod size Medium Pod reticulation Kernel nature Pod prominence of beak Medium Testa colour Monochrome, Rose Kernel shape Cylindrical Oil content (%) Oil yield (kg/ha) Shelling out turn (%) Shelling out turn (%) SMK (%) Fresh seed dormancy period Agronomical Practices Specific attributes/ identifiable characteristics of the variety Diseases and pests resistance Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and 	11	1	ÿ
 Plant growth habit Main stem growth habit Erect Side branch growth habit Leaflet shape and size Oblong elliptic and Medium Leaflet colour Dark Green Flowering pattern Alternate Flower inflorescence Simple Pod size Medium Pod constriction Medium Kernel nature 2-1 Seeded Pod prominence of beak Medium Kernel size Medium Kernel size Medium Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Shelling out turn (%) Shelling out turn (%) Protein content (%) SMK (%) Present Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha It is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Using a virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			
 Main stem growth habit Side branch growth habit Leaflet shape and size Oblong elliptic and Medium Leaflet colour Flowering pattern Flower inflorescence Flower inflorescence Simple Pod size Medium Pod constriction Medium Kernel nature Pod prominence of beak Medium Kernel size Medium Testa colour Monochrome, Rose Kernel size Medium Testa colour Monochrome, Rose Kernel size Medium Testa colour Monochrome, Rose Kernel size Medium Kernel size Medium Testa colour Monochrome, Rose Kernel size Medium Kernel size Podi content (%) 51.44 (High) Oil content (%) Si.44 (High) Oil yield (kg/ha) Fortilizers (bx 15 cm SMK (%) Protein content (%) SSMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha 1. It is a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			
 Side branch growth habit Leaflet shape and size Oblong elliptic and Medium Flowering pattern Flower inflorescence Pod size Pod constriction Medium Pod reticulation Medium Rernel nature Pod prominence of beak Medium Testa colour Monochrome, Rose Kernel shape Cylindrical I00 kernel weight (g) 56.48 (High) Oil content (%) Shelling out turn (%) Shelling out turn (%) Shelling out turn (%) Smk (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha I. It is a Virginia runner (spreading) type. Leaf shape is cylindrical I. It is a Virginia runner (spreading) type. Leaf shape is cylindrical I. It is a Virginia runner (spreading) type. Leaf shape is cylindrical Variety is comparable to the checks against tikka and Variety is comparable to the checks against tikka and 			
 Leaflet shape and size Dark Green Flowering pattern Alternate Flower inflorescence Pod size Medium Pod reticulation Medium Rernel nature Pod prominence of beak Testa colour Menochrome, Rose Kernel shape Cylindrical I00 kernel weight (g) 56.48 (High) Oil content (%) Oil yield (kg/ha) Shelling out turn (%) Shelling out turn (%) Shelling out turn (%) SMK (%) Present Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha In is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			
 Leaflet colour Flowering pattern Alternate Flower inflorescence Simple Pod size Medium Pod constriction Medium Kernel nature Pod prominence of beak Pod prominence of beak Medium Kernel size Medium Testa colour Monochrome, Rose Kernel size Medium Kernel size Medium Oil content (%) Oil content (%) Oil content (%) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) Shelling out turn (%) Fresh seed dormancy period Fresh seed dormancy period Prosent Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha 13 Specific attributes/ identifiable characteristics of the variety Li I is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			· · ·
 Flowering pattern Flower inflorescence Simple Pod size Medium Pod reticulation Kernel nature Pod prominence of beak Pod prominence of beak Medium Testa colour Monochrome, Rose Kernel size Medium Kernel size Medium Testa colour Monochrome, Rose Kernel size Medium Kernel size Medium Sternel size Medium Variety is a colour Monochrome, Rose Kernel size Medium Sternel size Medium Variety is a colour Monochrome, Rose Kernel size Medium Sternel size Medium Variety is a colour Medium Testa colour Medium Testa colour Medium Testa colour Medium Testa colour Medium Medium Testa colour Medium 			• 1
 Flower inflorescence Pod size Medium Pod constriction Medium Rernel nature Pod prominence of beak Medium Testa colour Medium Testa colour Medium Kernel size Medium Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Shelling out turn (%) Shelling out turn (%) SMK (%) Fresh seed dormancy period SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Tit is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 	•		
 Pod size Medium Pod constriction Medium Kernel nature 2-1 Seeded Pod prominence of beak Medium Testa colour Monochrome, Rose Kernel size Medium Kernel shape Cylindrical I00 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) 1034 Kernel yield (kg/ha) 2010 Shelling out turn (%) 73.84 Protein content (%) 95.12 Fresh seed dormancy period Present Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha I. It is a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 	•		
 Pod constriction Medium Kernel nature 2-1 Seeded Pod prominence of beak Medium Testa colour Monochrome, Rose Kernel size Medium Kernel size Medium Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) SMK (%) Protein content (%) 23.56 SMK (%) Fresh seed dormancy period Present Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha 1. It is a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			_
 Pod reticulation Kernel nature Pod prominence of beak Medium Testa colour Monochrome, Rose Kernel size Medium Kernel size Medium Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) SMK (%) Protein content (%) 23.56 SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha 1. It is a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			
 Kernel nature Pod prominence of beak Medium Testa colour Monochrome, Rose Kernel size Medium Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) 73.84 Protein content (%) 23.56 SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha 1. It is a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			
 Pod prominence of beak Testa colour Monochrome, Rose Kernel size Medium Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) SMK (%) Protein content (%) 23.56 SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha I. It is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			
 Testa colour Kernel size Medium Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) Shelling out turn (%) SMK (%) Protein content (%) 23.56 SMK (%) Fresh seed dormancy period Present Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha I. It is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Variety is comparable to the checks against tikka and 			
 Kernel size Kernel shape Cylindrical 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance Variety is comparable to the checks against tikka and 			
 Kernel shape 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Eernel shape is cylindrical Diseases and pests resistance Variety is comparable to the checks against tikka and 			,
 100 kernel weight (g) 56.48 (High) Oil content (%) 51.44 (High) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) 3.84 Protein content (%) SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance 			
 Oil content (%) Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) Shelling out turn (%) Shelling out turn (%) 23.56 SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Lit is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance Variety is comparable to the checks against tikka and 		•	·
Oil yield (kg/ha) Kernel yield (kg/ha) Shelling out turn (%) 23.56 SMK (%) Fresh seed dormancy period Present Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P ₂ O ₅ - K ₂ O/ha Specific attributes/ identifiable characteristics of the variety It is a Virginia runner (spreading) type. Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Variety is comparable to the checks against tikka and			
 Kernel yield (kg/ha) Shelling out turn (%) 73.84 Protein content (%) 23.56 SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers: 12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance Variety is comparable to the checks against tikka and 		` ,	
 Shelling out turn (%) Protein content (%) 23.56 SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance 	_		
 Protein content (%) SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance Variety is comparable to the checks against tikka and 			
 SMK (%) Fresh seed dormancy period Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance Variety is comparable to the checks against tikka and 		=	
 Fresh seed dormancy period 12 Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha 13 Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance 		` ′	
 Agronomical Practices Condition of sowing: Kharif rainfed Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance 		· · · · · · · · · · · · · · · · · · ·	
 Sowing distance: 60 x 15 cm Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance 	_		
 Seed rate (Kernel): 120 kg/ha Fertilizers:12.50-25.00-50.00 kg N - P₂O₅ - K₂O/ha Specific attributes/ identifiable characteristics of the variety Leaf shape is oblong elliptic and leaflet is dark green in colour. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. Kernel shape is cylindrical Diseases and pests resistance 			· ·
• Fertilizers:12.50-25.00-50.00 kg N - P ₂ O ₅ - K ₂ O/ha 13 Specific attributes/ identifiable characteristics of the variety 1. It is a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical 14 Diseases and pests resistance Variety is comparable to the checks against tikka and			
Specific attributes/ identifiable characteristics of the variety 1. It is a Virginia runner (spreading) type. 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical 14 Diseases and pests resistance Variety is comparable to the checks against tikka and			
characteristics of the variety 2. Leaf shape is oblong elliptic and leaflet is dark green in colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and	13	Specific attributes/ identifiable	
colour. 3. The pod size is medium. The reticulation and prominence of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical Variety is comparable to the checks against tikka and		•	2. Leaf shape is oblong elliptic and leaflet is dark green in
of pod beak are medium; while constriction is medium. 4. Kernel shape is cylindrical 14 Diseases and pests resistance Variety is comparable to the checks against tikka and			
4. Kernel shape is cylindrical 14 Diseases and pests resistance Variety is comparable to the checks against tikka and			
14 Diseases and pests resistance			
	14	Diseases and pests resistance	
		(give details of any resistance to	rust diseases, while stem rot and collar rot diseases are

	pest or diseases including races)	lower than the checks
15	Duration/ Maturity group	120 (118 to 126) days /Late maturity group
16	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)







1.14 Gujarat Groundnut 23 (GG 23) (Sorath Kiran) Virginia bunch (semi-spreading)

1	Name of crop	Groundnut (semi-spreading)
2	Botanical name	Arachis hypogaea L.
3	Name of variety	Gujarat Groundnut 23 (GG 23) (Sorath Kiran)
4	Parentage with details of its	JVR 503 x ALG 234
	pedigree	(K-09-33-B-7-B-B-B)
5	Breeding method	Hybridization followed by pedigree method of selection
6	Year of release	2019-20
7	Gazette notification	Awaited
8	Acknowledge particulars about the submission of germplasm samples with NBPGR	GG 23 (JSSP 60) IC 634172
9	Average pod yield (kg/ha)	2800
10	Recommended regions/areas of adoption	General cultivation in the <i>kharif</i> groundnut growing areas of the Gujarat State
11	Characteristics/Distinguishing mor	phological in brief:
•	Plant height (cm)	34.27
•	Plant growth habit	Decumbent-3
•	Main stem growth habit	Erect
•	Side branch growth habit	Tip moderately upturn
•	No. of branches per plant	7.2
•	No. of pods per plant	19.17
•	100 pod weight (g)	126.31
•	100 kernal weight (g)	47.86
•	Kernal yield (kg/ha)	1943
•	Haulm yield (kg/ha)	3454
•	Shelling out turn (%)	69.40
•	Oil content (%)	49.72
•	Oil yield (kg/ha)	966
•	Protein content (%)	26.01
•	SMK (%)	91.42
•	Leaflet shape and size	Lanceolate and Medium
•	Leaflet colour	Green
•	Flowering pattern	Alternate
•	Flower inflorescence	Simple
•	Pod size	Medium
•	Pod constriction	Shallow

	Pod reticulation	Medium
•		
•	No. of kernels/pod	2-1 Seeded
•	Pod prominence of beak	Medium
•	Testa colour	Monochrome, Rose
•	Kernel size	Medium
•	Kernel shape	Cylindrical
•	Seed dormancy	Present
12	Agronomical Practices	Condition of sowing: <i>Kharif</i> rainfed
		• Sowing distance: 45 x 15 cm
		• Seed rate (Kernel): 120 kg/ha
		• Fertilizers:12.50-25.00-50.00 kg N - P ₂ O ₅ - K ₂ O/ha
13	Specific attributes/ identifiable	1. It is a Virginia bunch (semi-spreading) type.
	characteristics of the variety	2. Leaf shape is lanceolate and leaflet is green in colour.
	•	3. The pod size is medium. The reticulation and
		prominence of pod beak are medium; while
		constriction is shallow.
		4. Kernel shape is cylindrical
14	Quality/ Nutritional/ Other	Superior in pod, kernel and oil yields
	features	
15	Diseases and pests resistance	Variety is comparable to the checks against tikka, rust,
	(give details of any resistance to	stem rot and collar rot; while damage due to leaf
	pest or diseases including races)	defoliators was less and the infestation was lower.
16	Duration/ Maturity group	121 (118 to 129) days /Late maturity group
17	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
-	5 - 6	University, Junagadh-362 001 (Gujarat)





1.15 Gujarat Groundnut 35 (GG 35) (Sorath Gold) Spanish bunch

1.13	1.15 Gujarat Groundhut 55 (GG 55) (Sorath Gold) Spanish bunch		
1	Name of crop	Groundnut	
2	Botanical name	Arachis hypogaea L.	
3	Name of variety	Gujarat Groundnut 35 (GG 35) (Sorath Gold)	
4	Parentage with details of its	TG 37A x JVB 2113	
	pedigree	S-10-28-B-9-B-B-B	
5	Breeding method	Hybridization followed by pedigree method of selection	
6	Year of release	2019-20	
7	Gazette notification	Awaited	
8	Acknowledge particulars about	GG 35 (J 95) IC 634444	
	the submission of germplasm		
	samples with NBPGR		
9	Average pod yield (kg/ha)	3177	
10	Recommended regions/areas of	General cultivation in the kharif groundnut growing	
	adoption	areas of the Gujarat State	
11	Characteristics/Distinguishing mor	rphological in brief:	

•	Plant height (cm)	30.43
•	Plant growth habit	Erect
•	No. of branches per plant	4.7
•	No. of pods per plant	18.57
•	100 pod weight (g)	101.93
•	100 kernal weight (g)	42.79
•	Kernal yield (kg/ha)	2267
•	Haulm yield (kg/ha)	2665
•	Shelling out turn (%)	71.36
•	Oil content (%)	49.84
•	Oil yield (kg/ha)	1130
•	Protein content (%)	26.38
•	SMK (%)	92.98
•	Leaflet shape and size	Oblong elliptic and Medium
	Leaflet colour	Light Green
•	Flowering pattern	Sequential
•	Flower inflorescence	Compound
•	Pod size	Medium
•	Pod constriction	Shallow
•	Pod reticulation	Absent
•	No. of kernels/pod	2-3 Seeded
•	Pod prominence of beak	Medium
•	Testa colour	Monochrome, Rose
•	Kernel size	Medium
•	Kernel shape	Spheroidal
•	Seed dormancy	Present
12	Agronomical Practices	• Condition of sowing: <i>Kharif</i> rainfed
		• Sowing distance: 45 x 15 cm
		• Seed rate (Kernel): 100-110 kg/ha
10		• Fertilizers:12.50-25.00-50.00 kg N - P ₂ O ₅ - K ₂ O/ha
13	Specific attributes/ identifiable	1. It is a Spanish bunch (erect) type.
	characteristics of the variety	2. Leaf shape is oblong elliptic.3. Leaflet is medium in size and light green in colour
		4. Pod size medium and smooth
		5. Pod beak and constriction shallow
14	Quality/ Nutritional/ Other	1. Higher kernel & oil yield and number pods per plant.
	features	2. Higher oil and protein contents
15	Diseases and pests resistance	Variety is comparable to the checks against tikka, rust,
	(give details of any resistance to	stem rot and collar rot; while infestation due to leaf
	pest or diseases including races)	defoliators was lower.
16	Duration/ Maturity group	105 (93-110) days /Medium maturity group
17	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)





2. Castor:

2.1 Gujarat Castor 3 (GC 3)

1	Name of crop	Castor
2	Botanical name	Ricinus communis L.
3	Name of variety	Gujarat Castor 3 (GC 3)
4	Parentage with details of its	F ₇ T (JP 65 x JI 88) x 48-1
-	pedigree vitil details of its	1 / 1 (31 (33 x 31 (6)) x +6 1
5	Breeding method	Pedigree selection
6	Year of release	2006-07
7	Gazette notification	S. O. 1708 (E) & Date: 26.07.2012
8	Acknowledge particulars about	IC: 564786
	the submission of germplasm	
	samples with NBPGR	
9	Potential yield (kg/ha)	3500-4000
10	Average yield (kg/ha)	2340
11	Recommended regions/areas of	Castor growing areas of Gujarat State under irrigated
	adoption	condition.
12	Characteristics/Distinguishing mor	
•	Plant height (cm)	105-110
•	100 seed weight (g)	29.64
•	Oil content (%)	49.67
•	Stem colour	Mahogany
•	Stem leaves waxy bloom	Present, Triple bloom
•	Stem nature of internodes	Elongated
•	No. of nodes up to main spike	16 (15-18)
•	Plant growth habit	Normal, Medium
•	Plant branching pattern	Divergent
•	Leaf shape	Flate
•	Leaf colour	Dark green with purple creation on tender leaves
•	Nature of spike	Loose
•	Sex expression	Mostly female, interspersed monoecious
•	Capsule size	Medium
•	Nature of capsule	Spiny
•	Capsule spine length	Medium
•	Capsule Dehiscence	Non-dehiscent
•	Seed size	Medium
•	Seed colour	Chocolate
•	Seed Mottling	High
•	Seed Caruncle	Small
•	Length of main spike (cm)	46 (45-50)
		<u> </u>

	Effective entire non-plant	0 (0 10)
•	Effective spike per plant	9 (8-10)
•	No. of capsules on main spike	44 (40-50)
13	Agronomical Practices	Condition of sowing: Irrigated condition
		• Sowing distance: 120 x 60 cm
		• Seed rate: 5-6 kg/ha.
		• Fertilizers: N:P:K 120:50:40 kg/ha
14	Specific attributes / identifiable	The variety is resistance to lodging and possesses non-
	characteristics of the variety	shattering habit.
15	Quality / Nutritional / Other	Oil content (49.67 %)
	features	
16	Diseases and pests resistance	The variety is tolerant against thrips. It is highly
	(give details of any resistance to	resistance to wilt, tolerance to root rot and sucking
	pest or diseases including races)	pests.
17	Maturity in number of days	Primary spike 100-104 and seed to seed 210 days.
18	Originating source/ Institute	Main Oilseeds Research Station, Junagadh Agricultural
		University, Junagadh-362 001 (Gujarat)





2.2 Gujarat Castor Hybrid 9 (GCH 9)

1	Name of crop	Castor
2	Botanical name	Ricinus communis L.
3	Name of variety	Gujarat Castor Hybrid 9 (GCH9)
4	Parentage with details of its pedigree	SKP-84 x PCS-124
5	Breeding method	Heterosis breeding
6	Year of release	2016-17
7	Gazette notification	S. O. 6318 (E), Date: 26.12.2018
8	Acknowledge particulars about the	Accession IC No.
	submission of germplasm samples	1) GCH 9 (JHB-1018) : 621486
	with NBPGR	2) SKP-84 (Female) : 537353
		3) PCS-124 (Male) : 321487
9	Potential yield (kg/ha)	6000
10	Average yield (kg/ha)	3820
11	Recommended regions/areas of	Castor growing areas of Gujarat State under irrigated
	adoption	condition during <i>kharif</i> season.
12	Characteristics/Distinguishing morpho	
•	Plant height (cm)	66 (60-70)
•	Bloom	Triple
•	100 seed weight (g)	28.5 (27 - 30)
•	Oil content (%)	48.3 (47.5 - 49.5)
•	Stem colour	Mahogany
•	Plant growth habit	Medium
•	Branching	Divergent
•	No. of nodes up to primary spike	16 (14 - 17)
•	Length of primary spike (cm)	60 (55 - 65)
•	No. of capsules on primary spike	70 (60 - 90)
•	No. of effective spike per plant	9.7 (8 - 12)

•	Type of internodes	Elongated			
•	Leaf shape	Shallow cup			
•	Nature of spike	Semi-compac	et		
•	Nature of capsule	Spiny			
•	Sex expression	Mostly femal	e/ Intersperse	ed staminate fl	ower
•	Seed colour	Light chocola	ate		
•	Days to 50 % flowering	61 (55-65) D	ays		
13	Agronomical Practices	• Time of se	owing: Montl	n of August	
		Sowing di	istance: 120	x 60 cm	
		• Seed rate:	5 kg/ha		
				: 50 : 40 kg/h	
14	Specific attributes/ identifiable	_		duration hy	_
	characteristics of the variety	-	_	with medium	plant stature
1.7		and shallow o			(00.22.0()
15	Quality / Nutritional / Other features			ricinoleic acid	
16	Diseases and pests resistance (give details of any resistance to pest			to Fusarium Thrips, leaf	
	or diseases including races)			in the hybrid	
	of diseases merading faces)	condition.	station is low	in the hybrid	a under meia
17	Maturity in number of days and		e 110-120 a	nd seed to s	eed 180-210
	maturing group	days and med			
18	Specific recommendation on seed			n be maintai	ned through
	production	temperatu		interspersed	
				econd fortnigl	nt of January
		_	condition.		
				ed seed produc	
		to 15 th Au		e taken up fr	om 15 July
			_	of parents and	d hybride for
				(GOT charact	•
		Characters	_	Male	Hybrid
		Stem colour	Mahogany	Green	Mahogany
		Bloom	Triple	Double	Triple
		Internode	Condensed	Elongated	Elongated
		Leaf shape	Deep cup	Shallow cup	Shallow cup
		Dlant tyma	Dayonf	Medium tall	Medium tall
		Plant type Branching	Dwarf Convergent	Divergent	Divergent
19	Originating source/ Institute			ation, Junagae	l d h
1)	Originating source/ montate			nagadh-362 0	
		8-1-0 artarar	, Jibicj , Ju		- () Gjurut)





3. Sesame

3.1 Gujarat Til 3 (G. Til 3)

1	Name of crop	Sesame

2	Botanical name	Sesamum indicum L.	
3	Name of variety	Gujarat Til 3 (G. Til 3)	
4	Parentage with details of its pedigree	G. Til 1 x AHT 85	
5	Breeding method	Hybridization followed by selection.	pedigree method of
6	Year of release	2005-06 for <i>Kharif</i> season summer season in 2011-12.	and Endorsement for
7	Gazette notification	S. O. 449 (E) & Date 11.02.20	009
8	Acknowledge particulars about the submission of germplasm samples with NBPGR	IC: 545633	
9	Potential seed yield (kg/ha)	In <i>kharif</i> season 1606 and in	summer season 1706
10	Average seed yield (kg/ha)	In <i>kharif</i> season 719 and in s	ummer season 1200
11	Recommended regions/areas of adoption	Kharif and summer in Saurasl	ntra region.
12	Characteristics/ Distinguishing morphological in brief	Kharif season	Summer season
•	Days to 50% flowering (Days)	Medium (39)	Medium (34)
•	Flower petal colour	Light purple	Light purple
•	Flower petal hairiness	Sparse	Sparse
•	Plant height (main stem in cm)	Medium (97)	Short (60)
•	Plant branching habit	Medium	Medium
•	Plant branching pattern	Basal branching	Basal branching
•	Primary branches per plant	3.02	1.70
•	Stem hairiness	Absent	Absent
•	Leaf lobes	Slightly lobed	Slightly lobed
•	Leaf size	Large	Large
•	Leaf serration of margin	Weak	Weak
•	Capsule hairiness	Absent	Absent
•	Capsule locule number/capsule	Four	Four
•	Capsule shape	Broad oblong	Broad oblong
•	Capsule number/leaf axil	One	One
•	Capsule arrangement	Opposite	Opposite
•	Capsule length	Long	Long
•	Maturity days to maturity (Days)	Medium (85)	Medium (83)
•	Seed coat colour	White	White
•	Seeds per capsule	69	60
•	1000 seed weight (g)	High (3.23)	High (3.44)
•	Oil content (%)	Medium (46.2)	Medium (47.3)
13	Agronomical Practices	 Time of sowing: 15th February for summer season and <i>Kharif</i> cultivation at normal sowing condition. Sowing distance: Summer: 30 x 10 cm. <i>Kharif</i>: 60 x 10 cm. Seed rate: 3.0 kg/ha. Fertilizer: N:P:K 50:25:40 kg/ha. 	
14	Specific attributes/Describe at least two identifiable characteristics of the variety		
15	Quality / Nutritional / Other features	Oil content (%): 47.3Suitable for export.	

16	Diseases and pests resistance (give	The gall fly and mite infection is considerably lower.
	details of any resistance to pest or	
	diseases including races)	
17	Duration/ Maturity group	85 days in kharif and 83 days in summer season
		/Early maturity group.
18	Originating source/ Institute	Agricultural Research Station, Junagadh Agricultural
		University, Amreli-365 601 (Gujarat)





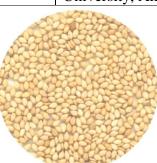


3.2 Gujarat Til 4 (G. Til 4)

1	Name of crop	Sesame
2	Botanical name	Sesamum indicum L.
3	Name of variety	Gujarat Til 4 (G. Til 4)
4	Parentage with details of its	G. Til 1 x RT 125
	pedigree	
5	Breeding method	Hybridization followed by pedigree method of
		selection.
6	Year of release	2009-10
7	Gazette notification	S. O. 1708 (E) & Date: 26.07.2012
8	Acknowledge particulars about the	IC: 584256
	submission of germplasm samples	
	with NBPGR	15.00
9	Potential seed yield (kg/ha)	1563
10	Average seed yield (kg/ha)	770
11	Recommended regions/areas of	Kharif rainfed conditions in the North Saurashtra
12	adoption Characteristics/Distinguishing morp	Agro-climatic Zone-VI.
	Days to 50 % flowering (Days)	Medium (41)
•		
•	Flower petal colour	Light purple
•	Flower petal hairiness	Sparse (97)
•	Plant height (main stem in cm)	Medium (87)
•	Plant branching habit	Medium
•	Plant branching pattern	Basal branching
•	Stem hairiness	Absent
•	Leaf lobes	Slightly lobed
•	Leaf size	Large
•	Leaf serration of margin	Weak
•	Capsule hairiness	Absent
•	Capsule locule number/capsule	Four
•	Capsule shape	Narrow oblong
•	Capsule number/leaf axil	More than one
•	Capsule arrangement	Cluster
•	Capsule length	Medium
•	Capsule per plant	57
•	Maturity days to maturity (Days)	Medium (81)
-		

•	Seed coat colour	White
•	1000 seed weight (g)	Medium (2.80)
•	Oil content (%)	Medium (48.1)
13	Agronomical Practices	 Time of sowing: <i>Kharif</i> cultivation at normal sowing condition. Sowing distance: 60 x 10 cm. Seed rate: 3.0 kg/ha. Fertilizer: N:P:K 50:25:40 kg/ha.
14	Specific attributes/ identifiable characteristics of the variety	Seeds are white so that suitable for export.
15	Quality / Nutritional / Other features	• Oil content (%): 48.1
16	Diseases and pests resistance (give details of any resistance to pest or diseases including races)	Incidence of leaf spot is low.
17	Duration/ Maturity group	81 days/Early maturity group
18	Originating source/ Institute	Agricultural Research Station, Junagadh Agricultural University, Amreli-365 601 (Gujarat)







3.3 Gujarat Junagadh Til 5 (GJT 5)

1	Name of crop	Sesame
2	Botanical name	Sesamum indicum L.
3	Name of variety	Gujarat Junagadh Til 5 (GJT 5)
4	Parentage with details of its pedigree	AT 90 x AT 104
		(K01-5-B-2-1-1-2-1-B)
5	Breeding method	Hybridization followed by pedigree method of
		selection.
6	Year of release	2014-15
7	Gazette notification	S. O. 3540 (E) & Date: 22.11.2016
8	Acknowledge particulars about the	GJT 5 (AT 231) IC: 611688
	submission of germplasm samples	
	with NBPGR	
9	Potential seed yield (kg/ha)	2344
10	Average seed yield (kg/ha)	1241
11	Recommended regions/areas of	Summer irrigated conditions in the Saurashtra
	adoption	region.
12	Characteristics/Distinguishing morphol	ogical in brief:
•	Days to 50% flowering (Days)	Medium (39)
•	Flower petal colour	Light purple
•	Flower petal hairiness	Sparse
•	Plant height (main stem in cm)	Short (70)
•	Plant branching habit	Medium
•	Plant branching pattern	Basal branching

•	Primary branches per plant	2.98
•	Stem hairiness	Absent
•	Leaf lobes	Slightly lobed
•	Leaf size	Large
•	Leaf serration of margin	Weak
•	Capsule hairiness	Absent
•	Capsule locule number per capsule	Four
•	Capsule shape	Narrow oblong
•	Capsule number/leaf axil	More than one
•	Capsule arrangement	Opposite
•	Capsule length (cm)	Long (2.96)
•	Capsule per plant	58
•	Seeds per capsule	77
•	Seed coat colour	White
•	1000 seed weight (g)	High (3.63)
•	Oil content (%)	Medium (46.98)
13	Agronomical Practices	Time of sowing: Third week of February.
		• Sowing distance: 30 x 10 cm.
		• Seed rate: 3.0 kg/ha.
		• Fertilizer: N:P:K 50:25:40 kg/ha.
14	Specific attributes/ identifiable	Seeds are white and bold, hence, suitable for
1.7	characteristics of the variety	export.
15	Quality / Nutritional / Other features	• Oil content (%): 46.98
16	Disasses and pasts resistance (size	Incidence of Alternation Pr. Compagnors leaf and to
10	Diseases and pests resistance (give details of any resistance to pest or	Incidence of Alternaria & Cercospora leaf spots, Phytopthora and Powdery mildew diseases as well
	diseases including races)	as like leaf webber/capsule borer, gallfly, mites and
	and the state of t	jassids was not appeared during testing period.
17	Duration/ Maturity group	91 days/Late maturity group
18	Originating source/ Institute	Agricultural Research Station, Junagadh
		Agricultural University, Amreli-365 601 (Gujarat)









3.4 Gujarat Til 6 (G. Til 6)

1	Name of crop	Sesame
2	Botanical name	Sesamum indicum L.
3	Name of variety	Gujarat Til 6 (G. Til 6)
4	Parentage with details of its	AT 117 x G. Til 2
	pedigree	(K06-31-B-1-2-3-1-B-B)
5	Breeding method	Hybridization followed by pedigree method of
		selection.
6	Year of release	2017-18
7	Gazette notification	S.O. 1498 (E), Dt. 01/04/2019
8	Acknowledge particulars about the	G. Til 6 (AT 332) IC: 625668
	submission of germplasm samples	

	with NBPGR	
9	Potential seed yield (kg/ha)	1611
10	Average seed yield (kg/ha)	1010
11	Recommended regions/areas of	Kharif rainfed conditions of the Gujarat state and
	adoption	Summer irrigation conditions in the Saurashtra
		region.
12	Characteristics/Distinguishing morph	pological in brief:
•	Days to 50% flowering (Days)	Medium (40)
•	Flower petal colour	Light purple
•	Flower petal hairiness	Sparse
•	Plant height (main stem in cm)	Short (104)
•	Plant branching habit	Few
•	Plant branching pattern	Basal branching
•	Primary branches per plant	1.98
•	Stem hairiness	Absent
•	Leaf lobes	Slightly lobed
•	Leaf size	Medium
•	Leaf serration of margin	Weak
•	Capsule hairiness	Absent
•	Capsule locule number per capsule	Four
•	Capsule shape	Narrow oblong
•	Capsule number/leaf axil	More than one
•	Capsule arrangement	Opposite
•	Capsule length (cm)	Long (2.87)
•	Capsule per plant	61
•	Seeds per capsule	66
•	Seed coat colour	White
•	1000 seed weight (g)	High (3.10)
•	Oil content (%)	Medium (46.68)
13	Agronomical Practices	• Time of sowing: On the onset of monsoon.
		• Sowing distance: 60 x 10 cm.
		• Seed rate: 3.0 kg/ha.
		• Fertilizer: N:P:K 50:25:40 kg/ha.
14	Specific attributes/ two identifiable	Seeds are white and bold, hence, suitable for export.
	characteristics of the variety	
15	Quality / Nutritional / Other	• Oil content (%): 46.68
4 -	features	
16	Diseases and pests resistance (give	Low incidence of phyllody, leaf curl as well as
	details of any resistance to pest or	cercospora and alternaria leaf spot disease in
17	diseases including races)	proposed variety as compared to checks.
17	Originating source/ Institute	87 days (81-94) /Late maturity group
18	Originating source/ Institute	Agricultural Research Station, Junagadh Agricultural University, Amreli-365 601 (Gujarat)
		Omvoisity, Amien-303 001 (Oujarat)



4. Soybean:

4.1 Gujarat Junagadh Soybean 3 (GJ Soy 3)

4.1 G	ujarat Junagadh Soybean 3 (GJ S	oy 3)
1	Name of crop	Soybean
2	Botanical name	[Glycine max (L.) Merr.]
3	Name of variety	Gujarat Junagadh Soybean 3 (GJS 3)
4	Parentage with details of its	Germplasm line maintaining at ARS, JAU, Amreli
	pedigree	
5	Breeding method	Plant Introduction
6	Year of release	2010-11
7	Gazette notification	Awaited
8	Acknowledge particulars about	GJS 3 (KB 85) IC: 587749
	the submission of germplasm	
9	samples with NBPGR	2412
10	Potential yield (kg/ha)	1860
11	Average yield (kg/ha) Recommended regions/areas of	Soybean growing areas in rainfed conditions in the
11	adoption	Saurashtra region.
12	Characteristics/Distinguishing mor	
•	Stem type	Determinate
•	Leaflet shape	Broad
•	Leaf colour and shape	Dark green and Broad
•	Number of leaflets	Three
•	Seeds per pod	Three
•	Seed colour	Yellowish brown
•	Pubescence	Sparse short
•	Pubescence colour	Grey
•	Corolla colour	Purple
•	Mature pod colour	Yellow
•	Seed coat colour	Yellowish brown
•	Seed coat pattern	Light hilum
•	Hilum colour	Brown
•	Seed coat surface	Dull
•	Strophiole at the hilum	Present
•	Shattering nature	Non shattering
•	Days to 50 % flowering	42
•	Plant height (cm.)	46.8
•	Branches per plant	4.2
•	Pods per plant	54
•	100 seed weight (g.)	10.08
•	Oil content (%)	19.15
13	Agronomical Practices	Time of sowing: onset of monsoon or third week of
	1 Igronomical Flactices	June to second week of July.
		• Sowing distance: 45 x 10 cm.
		• Seed rate: 60 kg/ha.
		• Fertilizer: N:P:K 30:30:00 kg/ha.
14	Specific attributes/ identifiable	Seeds are yellowish brown and having good
	characteristics of the variety	appearance. The variety is determinate type, likely to be
		lodging resistance.
15	Quality / Nutritional / Other	• Oil content (%): 19.15
	features	
16	Diseases and pests resistance	Major diseases and major pest infection was
	(give details of any resistance to	considerably lower.

	pest or diseases including races)	
17	Duration/ Maturity group	101 days/Medium maturity group
18	Originating source/ Institute	Agricultural Research Station, Junagadh Agricultural
		University, Amreli-365 601 (Gujarat)

