

## GROUNDNUT

- **12 groundnut varieties were released from this centre (1979-2013). Out of these, Narayani and Dharani have become popular among farmers of the state.**
- **Narayani**, derivative of the cross, JL 24 × Ah 316/S is early maturing, drought tolerant with consistent performance across different soil types and environments has replaced 20% of TMV 2 and JL 24 area. The characteristic features of the variety are:



### Characteristic features

<b>Duration (days)</b>	:	<b>100 kharif, 105 rabi</b>
<b>Pod yield (q/ha)</b>	:	<b>20-25 kharif, 40-45 rabi</b>
<b>Shelling out-turn (%)</b>	:	<b>75-76</b>
<b>Oil content (%)</b>	:	<b>49</b>
<b>100 kernel weight(g)</b>	:	<b>42-45</b>
<b>Special characters</b>	:	<b>Uniform maturity, suitable for low to medium rainfall areas, tolerant to drought, high frequency of mature kernels (95%), red testa variety.</b>

- **TCGS 1043**, released in 2013 as 'Dharani is drought tolerant, water use efficient, tolerant to stem and dry root rots, PBNB and PSND. The performance of TCGS 1043 under different situations is given hereunder:

Dharani ( TCGS 1043), high yielding drought tolerant groundnut culture released by state varietal release committee on 11-7-2012



### ❖ Characteristic features

➤ <b>Pedigree</b>	:	<b>VRI 2-XTCGP-6</b>
➤ <b>Duration</b>	:	<b>: 100-105 days</b>
➤ <b>Pod yield</b>	:	<b>16-26 q/ha( Kharif-Rainfed) 37-43 q/ha (Rabi)</b>
➤ <b>Shelling out-turn</b>	:	<b>75-77%</b>
➤ <b>Oil content</b>	:	<b>: 50 %</b>
➤ <b>100-seed weight</b>	:	<b>40-43g</b>
➤ <b>Special features</b>	:	<b>Drought tolerant, withstands up to 35 days dry spell, Uniform maturity, High SMK%, Attractive pods, Moderate stature, Tolerant to low light conditions</b>



Variety	Pedigree	Year of release	Duration	Pod yield (q/ha)		Shelling %	100 seed weight (g)	Sound mature kernel percentage	Oil content (%)	Special features
				Kharif	Rabi					
Tirupati-1	E.C-106983/3	1989	100	18-20	30-40	79	33-36	90-95	49	Early maturing and drought tolerant Spanish bunch groundnut variety, leaf lets narrow with ashy coating.
Tirupati-2	GAUG- 1 x Nc.Ac.FLA.14	1989	100-105	16-21	35-40	77	34-36	85-90	49	Strong pegs and recommended for cultivation in black soils where soil compaction is a problem at the time of harvest, moderately tolerant to kalahasti malady, a soil borne nematode incited problem.
Tirupati-3	Selection from TMV-10, a Virginia bunch variety with variegated testa	1991	125-130	20-25	35-45		50-52	85-90	53	Resistant to kalahasti malady a soil borne nematode incited problem, tolerant to foliar diseases, seeds dormant up to 40 days after harvest.
Tirupati-4	JL-24XAh316/S	1995	105	20-25	35-45	76	43-47	85-90	48-50	High yielding, mid-season moisture stress tolerant, early maturing variety, attractive light rose testa
Narayani	JL 24/Ah316/S	2002	100	20-25	40-45	76	40-45	90-95	49	Early maturing(100days) drought tolerant performance highly stable in different types of soils and situations, popular among farmers of Rayalaseema and Telangana districts of Andhra Pradesh , replaced to an extent of 20%, the existing Spanish bunch varieties TMV 2 and JL24
Kalahasti (TCGS320)	TCG1709/TCG 1518	2002	105-110	--	45-50	74-76	50-53	85-90	52	A short duration (105-110days) kalahasti malady resistant variety suitable for cultivation all over the state during rabi season
Prasuna	TCG1717/TCG 1518	2006	105-110		40-45	75		85-90	48	Tolerant to kalahasti malady, medium bold seeds and rose testa, suitable for cultivation during rabi and kharif (I.D situation)
Abhaya	K-134XTAG-24	2006	105-110	20-25	40-45	76-79	38-40	85-90	52	Drought tolerant, LLS tolerant with fresh seed dormancy, short compact plant type, suitable for high rainfall areas
Greeshma (TCGS-APNL-888)	TIR46XJUG37	2009	95-100	20-25	40-45	76	40-45	85-90	50	Early (95-100days), water use efficient, short compact plant type, LLS tolerant
Rohini (TCGS-APNL-913)	Tirupati 4 x TIR 45	2010	90-95	20-25	40-45	75	38-42	85-90	49	Ultra-early (90-95days), water use efficient, short compact plant type, LLS tolerant
Bheema (TG-47)	TAG 24 x TG 19	2010	110-115	25-30	35-50	63-65	65-70	75-80	45	Early Spanish bunch variety with low oil and high sucrose

ICGV-00350	ICGV-87290 x ICGV-87846	2011	105-109	25-30	30-44	75	45	87	48	High yield, tolerant to LLS, rust and stem rot
Dharani (TCGS-1043)	VRI-2 x TCGP-6	2012	100-105	16-26	37-43	75-77	40-43	90	49	Drought tolerant – withstands up to 35 days dry spell, uniform maturity, high SMK%, attractive pods, moderate stature and tolerant to low light conditions



## PULSE CROPS

1. Redgram varieties LRG 38 and LRG 41 with bold seed and better recouping capacity found superior to LRG-30 were identified.
2. Identified genotypes suitable to light shallow soils viz., TRG-22, TRG-7 and TRG-33 with earliness and yield. TRG-22 with 160 days duration with seed yield of 16q/ha released in 2010.



3. Identified Redgram lines TRG-38, TRG-59 for wilt resistance through Molecular marker technique and in first year minikit testing.



4. TFB-1, field bean variety with photoperiod insensitivity, earliness and high green pod (40 q/ha) released in 2006. Field bean variety TFB-2 with 160-180 days duration and pod yield 35q/ha suitable to rainfed, inter cropping systems released in 2010



**TFB1**

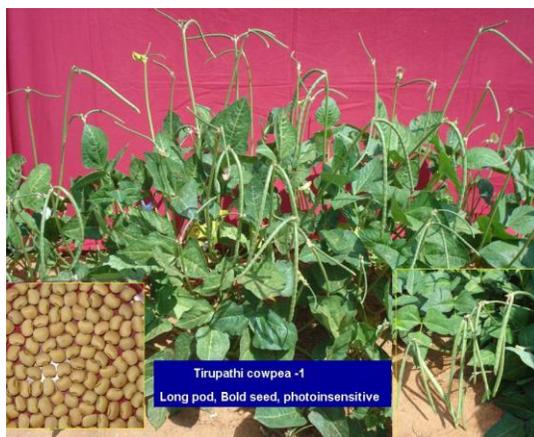


**TFB2**

5. Identified YMV resistant shiny seed line TBG 104 using MAS and it is in minikit testing.



6. In cowpea TPTC 29 developed photo insensitive, short duration (80-90 days) bushy line suitable for different cropping systems and seasons.



7. In jatropha, TJC-35 is released as Balaji during April'2010;

Yield : 12-14.5 q/ha, Oil: 29 %

