

Tamil Nadu Agricultural University

Variety Releases - 2010

1. TNAU Rice CO 50



Special features

- Medium slender rice
- High head rice recovery
- Intermediate amylose content
- Suitable for rice and idly making
- Moderately resistant to blast, sheath blight, brown spot, bacterial leaf blight and rice tungro disease

Parentage	: CO 43 / ADT 38 Hybridization and Pedigree method of selection
Duration	: 130 – 135 days
Season	: Late samba / Thaladi
Yield	: 6338 kg/ha [10.11% increased over ADT(R)46]
Highest yield obtained	: 10662 kg/ha
Area of adoption	: Suitable for cultivation as transplanted rice throughout rice growing areas of Tamil Nadu

2. TNAU Rice TRY 3



Special features

- Highly suitable for Idly making
- Moderately tolerant to sodicity
- Medium bold grain
- High Milling (71.3%) and Head Rice Recovery (66.0%)
- High out turn of rice flakes (82.2%)
- Resistant to leaf folder, stem borer and brown plant hopper
- Resistant to blast, brown spot, sheath rot and sheath blight

Parentage	: ADT 43 / Jeeraga Samba
Duration	: 135 Days
Season	: Samba / Late Samba / Thaladi
Yield	: 5833 kg / ha (10.8% over ADT (R) 46, 22.0% and 13.0% increased number of idlies than CR 1009 and ASD 16 respectively)
Highest yield obtained	: 10666 kg/ha
Area of adoption	: Trichy, Tirunelveli, Thanjavur, Tiruvarur, Nagappattinam and Ramnad Districts

3. TNAU Wheat COW 2



Special features

- Suitable for timely and late season conditions
- Semi-dwarf
- Non – lodging
- Non – shattering
- Reddish attractive grains (β -carotene-3.7 ppm)
- Quality grains (Protein -13.2%)
- Resistant to black, yellow and brown rusts

Parentage	: Mutant from NP200 through Gamma irradiation (200 Gray)
Duration	: 110 days
Season	: 15 th October to 15 th of November (Sowing)
Yield	: 4040 kg/ha (26.6% increase over NP 200)
Highest yield obtained	: 5320 kg/ha at The Nilgiris
Area of adoption	: Coimbatore, Tirupur, Vellore, Thiruvannamalai, Theni, Dindigul, Erode, Dharmapuri and Krishnagiri districts.

4. TNAU Sorghum COIMBATORE 30



Special features

- Dual purpose variety suited for grain and fodder
- Dry fodder with high drymatter digestibility
- Moderately resistant to shoot fly and stem borer
- Resistant to downy mildew
- Creamy white grains

Parentage : APK 1 / TNS 291

Duration : 100 - 105 days

Season : Rainfed : June – July, Sep.- Oct.

Irrigated : February-March

Yield : **Rainfed:**

Grain 2800 kg/ha, Dry fodder 6990 kg/ha
[20.7% increase over COS 28 and 19.3% increase over APK 1]

Irrigated:

Grain 3360 kg/ha, Dry fodder 9290 kg/ha
[11.1% increase over COS 28 and 11.2% increase over APK 1]

Highest yield : 5478 kg/ha

Area of adoption : All sorghum growing districts of TamilNadu except Cauvery Delta & Nilgiris

5. TNAU Blackgram CO 6



Special features

- Short duration
- Determinate plant type and non-shattering of pods
- Bold seed with mean 100 seed weight of 5.5 grams
- Good batter qualities and organoleptic traits
- Moderately resistant to yellow mosaic virus, stem necrosis and root rot
- Field tolerance to aphids, stemfly and spotted pod borer

Parentage	:	DU 2 / VB 20
Duration	:	60 - 65 days
Season	:	September – October
Yield	:	733 kg/ha [13.0% increase over VBN (Bg) 4 and 12.0% increase over VBN(Bg) 5]
Highest yield obtained	:	1800 kg/ha
Area of adoption	:	Blackgram growing districts of Tamil Nadu

6. TNAU Groundnut CO 6



Special features

- Tolerance to drought
- Bunchy pods
- Shelling out turn 73.5 %
- Oil content 49.5 %
- Acceptable pod traits

Parentage	: Derivative of the cross CS 9 / ICGS 5
Duration	: 125 – 130 days
Season	: Rainfed (May – June)
Pod yield	: Rainfed : 1914 kg/ha (29.4 and 77.1 % increased over VRI (Gn) 7 and Local respectively)
Highest yield obtained	: 3236 kg/ha
Area of adoption	: Namakkal district of Tamil Nadu

7. TNAU Sunflower Hybrid CO2



Special features

- High oil content (39.8 %)
- High volume weight (48g/100ml)

Parentage	: COSF 1 A X CSFI 99
Duration	: 85-90 days
Season	: Kharif and Rabi/ Summer
Pod yield	: Kharif : 1950 (13.4 and 17.1 per cent over Sunbred 275 and TCSH 1 respectively) Rabi / Summer: 2230 (12.9 and 15.9 per cent over Sunbred 275 and TCSH 1 respectively)
Highest yield obtained	: 3114 kg/ha
Area of adoption	: All sunflower growing areas in Tamil Nadu

8. TNAU Sugarcane SI 7



Special features

- High yielder and high quality cane
- Good Ratooners
- Easy to detrash
- No spines
- Non flowering
- Tolerant to drought and late water logging
- Moderately resistant to red rot disease

Parentage : CO 99043 / COG 93076

Duration : 11 months

Season : Early

Yield :

	Plant Crop	Ratoon Crop
	t/ha	
Cane Yield	154	146
Sugar Yield	20.5	19.4

(21.0% increase over CO 86032)

Highest yield : Cane yield - 168 t/ha

Area of adoption : All cane growing regions of Tamil Nadu

9. TNAU Coconut ALR 2



Special features

- Nut bearing in 5½ years
- Regular bearing habit
- 12 inflorescences per year
- Weight of copra - 135 g/nut
- 2.57 tonnes of copra per hectare
- 7400 nuts required to make one tonne of copra
- Oil content 64.7 percent
- Possesses drought tolerance
- Moderately resistant to rhinoceros beetle, red palm weevil and leaf blight

Parentage : Selection from Tiptur Tall

Maturity group : 80 years

Season : Recommended for all seasons

Yield : Average Yield: 109 nuts/palm /year
Annual yield: 18988 nuts/ha/year
(12 % over ECT and 99% over VPM 3)

Highest yield obtained : 140 nuts / palm / year

Area of adoption : All coconut growing areas of TamilNadu especially drought grown areas

10. TNAU Brinjal VRM 1



Special features

- High yielding
- Spines on leaf, stem and calyx
- Cluster bearing
- Fruits oval in shape, glossy pink in colour with green tinge in the distal end
- Resistant to leaf spot, veriticism wilt and epilachna beetle

Parentage	:	Pure line selection from Elavambadi Village of Vellore Dist.
Duration	:	140 - 150 days
Season	:	June-July, Sept.-Oct., Mach-April
Yield	:	40 – 45 t/ ha (27.0% increase over Palur 1)
Highest yield obtained	:	49.88 t/ha
Area of adoption	:	Vellore and Tiruvannamalai districts

11. TNAU Tomato Hybrid CO 3



Special features

- Plants semi determinate and suitable for high density planting
- Fruits round, medium sized and borne in clusters of 3-5
- Good fruit quality with TSS of 5.58⁰ brix, titrable acidity of 0.73% and ascorbic acid content of 35.72 mg/100g
- Moderately resistant to leaf curl virus disease and root knot nematode

Parentage	: HN 2 / CLN 2123 A
Duration	: 145 - 150 days
Season	: Feb. – Mar., May-June and Nov. – Dec.
Yield	: 96.2 t/ha (9.76 and 42.24% increase over COTH 2 and Lakshmi respectively)
Highest yield obtained	: 129.5 t/ha
Area of adoption	: Coimbatore, Salem, Cuddalore, Thanjavur, Madurai, Theni, Kancheepuram, Thoothukudi, Dindigul, Trichy, Dharmapuri, Krishnagiri, Vellore and Thiruvannamalai districts

12. TNAU Chilli Hybrid CO 1



Special features

- Plants semi tall, spreading and highly branched
- Unripe fruits light green in colour, elongated, tapering towards the tip and 10.5 – 12.0 cm long
- Capsaicin and oleoresin contents of 0.58 % and 14.0 % respectively
- Ascorbic acid 120 mg/100 g fruit
- Moderately resistant to fruit rot disease

Parentage	: Selection 1 / CA 97
Duration	: 195-205 days
Season	: June-July, Sept.-Oct. and Jan, -Feb.
Yield	: Green fruit yield : 28.10 t/ha Dry fruit yield : 6.74 t/ha (NS 1701 increase over Green fruits – 14.65 and Dry fruits – 19.15%)
Highest yield obtained	: Green fruits : 34.67 t/ha Dry fruits : 8.64 t/ha
Area of adoption	: Thiruvannamalai, Salem, Kancheepuram, Dharmapuri, Krishnagiri, Coimbatore, Madurai, Thoothukudi, Thanjavur, Trichy and Theni districts

13. TNAU Celery OTY 1



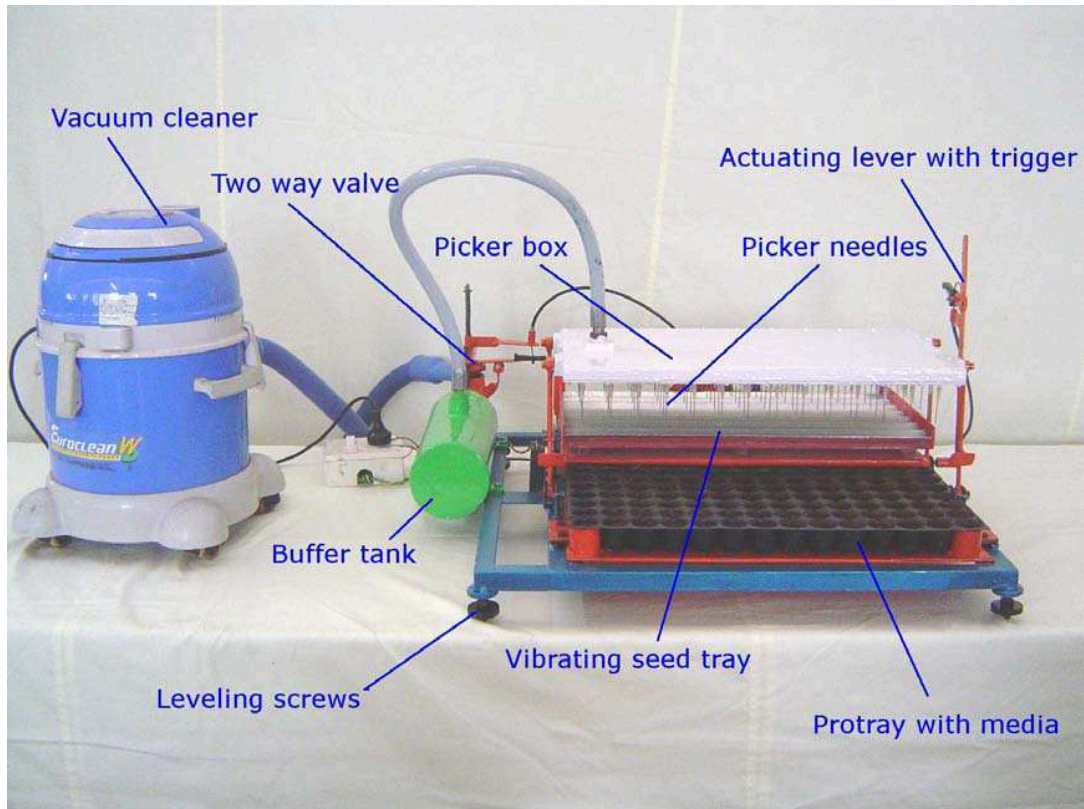
Special features

- Grows 900m above MSL
- The seed oil content is 1.71 %
- Resistant to white flies, aphids and root knot nematode (*Meloidogyne incognita*) and leaf blight

Parentage	:	Selection from the six germplasm types
Duration	:	115 days
Season	:	April - June, August – October and February - April
Yield	:	Greens - 30.5 t/ha (30.3% higher than the local type) Seed - 1.40 t leaves /ha (38.61% higher than the local type)
Area of adoption	:	Nilgiris

II. FARM IMPLEMENTS

1. Needle type tray seeder for vegetable nursery



Special features

- Singulated raw / pelleted seeds placed in all the cells in a single stroke
- Cost of operation is Rs.280 for sowing 750 trays / day
- Saving of 60% labour and 52% cost
- Cost of equipment is Rs.10,000 including the vacuum source

2. Trailer mounted steering for power tiller – trailer system



Special features

- Avoids the operator getting down and turn the power tiller trailer system
- All the control operations well within the reach of the operator
- Shorter turning radius, enabling the operator to take turns even in very narrow space
- Operator feels comfortable while taking a turn
- Reduced discomfort to the operator through elimination of lateral and vertical swing of the handle
- Cost of the steering system is Rs.1,000/-

III. TECHNOLOGIES

1. Sorghum Composite biscuits



1. SORGHUM COMPOSITE BISCUITS

Details of Technology

- Sorghum contains more energy, protein, fat, and fiber compared to rice
- The optimized sorghum biscuits ingredients used in the preparation are refined wheat flour (45%) sorghum flour (50 %), defatted soy flour (5%) fat (30%), sugar (10%), baking powder (0.5%), flavour (0.5%) and require amount of water
- Sorghum chilly biscuits - refined wheat flour (45%) sorghum flour (50%), defatted soy flour (5%) fat (30%), sugar (5%), salt (0.3%), chilly paste (10%), baking powder (0.5%), flavour (0.5%) and require amount of water
- Sorghum salt biscuits - refined wheat flour (45%) sorghum flour (50%), defatted soy flour (5%) fat (30%), sugar (5%), salt (0.3%), baking powder (0.5%), flavour (0.5%) and require amount of water

Benefits

- Suitable for diabetic patients as sorghum has a Low glycemic index
- Popularization of the composite biscuit will help in value addition for sorghum. It will increase the income of the sorghum growers, bakers and entrepreneurs and will improve the health profile

Economics

- Cost of production : Rs.10.50 / 100 gm