



**Tamil Nadu Agricultural University**  
Coimbatore – 641 003

Dr. M. Rajavel, Ph.D.,  
Public Relations Officer  
Mobile: 97903 47444



Phone: 0422 - 6611302  
Fax: 0422 – 2431821  
E-mail: [pro@tnau.ac.in](mailto:pro@tnau.ac.in)


To  
The Editor,  
Sir,



Date: 15.02.2023





I request that the following message may kindly be published in your esteemed daily:




**Tamil Nadu Agricultural University**  
**Varieties/Technologies developed during 2023**





Item	Nos.
Crop varieties (Agricultural, Horticultural and Forestry crops)	23
Technologies	10
Farm implements/ Machineries	06
<b>Total</b>	<b>39</b>

S. No.	Name of the variety/ hybrid	Parentage	Duration	Salient features	Photo
1.	Rice CO 56	CO (R) 50 x CB 05501	130-135 days	<ul style="list-style-type: none"> <li>• <i>Samba / late Samba / Thaladi</i></li> <li>• Yield: 6372 kg/ha</li> <li>• Non-lodging with high tillering ability; long panicles with &gt; 350 grains per panicle</li> <li>• Medium slender white rice with good milling percentage (67%) and head rice recovery (64.1%)</li> <li>• Moderately resistant to multiple diseases viz., blast, BLB, brown spot, sheath rot, sheath</li> </ul>	





				blight, RTD and glume discolouration <ul style="list-style-type: none"> <li>Moderately resistant to stem borer and gall midge</li> </ul>	
2.	Rice Improved <i>Kavuni</i> CO 57	CO (R) 50 x <i>Kavuni</i>	130-135 days	<ul style="list-style-type: none"> <li>Suitable for all seasons</li> <li>Yield:4638 kg/ha</li> <li>Photo-insensitive</li> <li>Contains medicinal properties viz., reduced levels of total carbohydrates (65-70%), increased amount of total dietary fibre (3-3.5%), medium glycemic index (67%), higher levels of Lutein (205.35µg/100g), anthocyanins (148 mg/100 g), antioxidants, flavonoids (6.54 mg/100 g) and resistant starch.</li> <li>Resistant to bacterial leaf blight, sheath blight, false smut and moderately resistant to sheath rot, brown spot, grain discoloration, stem borer and leaf folder.</li> </ul>	
3.	Rice ADT 58	ADT 39 x Konark	125 days	<ul style="list-style-type: none"> <li><i>Thaladi</i> (October-November)</li> <li>Yield:6376 kg/ha</li> <li>Medium slender grain, 72.0% Milling %; 65.0% Head Rice Recovery</li> <li>Suitable for cooked rice and <i>Idli</i> making</li> <li>Moderately tolerant to Leaf folder and stem borer; Moderately resistant to blast, sheath blight, sheath rot</li> </ul>	
4.	Rice ASD 21	ASD 16 x <i>Manjal Saradai</i>	120 days	<ul style="list-style-type: none"> <li>Early <i>Kar</i> / Early <i>Kuruvai</i> / Late <i>Pishanam</i></li> <li>Yield:6330 Kg/ha</li> <li>Erect &amp; Non lodging plant type, Short bold white rice, Head Rice recovery (59.3%), cooked rice volume expansion 4.1, non sticky and uniform.</li> <li>Flour properties better than ASD 16 &amp; TPS 5</li> <li>Moderately resistant to stem borer, leaf folder, gall midge, blast, sheath blight and bacterial leaf blight</li> </ul>	

5.	Maize Hybrid COH (M) 11	UMI 1240 × UMI 1210	105 – 110 days	<ul style="list-style-type: none"> <li>• <i>Aadi</i> (June-July), <i>Purattaasi</i> (Sep-Oct) and <i>Thai pattam</i> (Jan-Feb)</li> <li>• Irrigated: 8100 kg/ha; Rainfed: 6590 kg/ha</li> <li>• Seed production of the hybrid is easier as the male and female parental lines can be sown on the same day.</li> <li>• Drought tolerant; Orange yellow semi-dent kernels with high test weight.</li> <li>• Better fodder qualities</li> <li>• Moderately resistant to Fall Army Worm and Charcoal Rot</li> </ul>	
6.	Pearl millet Hybrid COH 10	ICMA 10444A x PT 6679	85-90 Days	<ul style="list-style-type: none"> <li>• Irrigated: <i>Aadi</i> (June-July), <i>Chithirai</i> (April-May) Rainfed: <i>Purattaasi pattam</i> (Sep-Oct)</li> <li>• Irrigated: 3020 kg/ha; Rainfed: 2050 kg/ha</li> <li>• Bold grain with semi compact long ear head</li> <li>• Medium level of Fe (59 ppm) and Zn (37 ppm); High protein (15.6%)</li> <li>• Tolerant to shoot fly; Resistance to downy mildew and blast</li> </ul>	
7.	Sorghum K 13	ICSB 518 x SPV 1489	95-100 days	<ul style="list-style-type: none"> <li>• <i>Aadi</i> and <i>Purattaasi pattam</i></li> <li>• Grain yield: 2575 kg/ha; Stover yield: 11.4 t/ha</li> <li>• Dual purpose suited for grain and fodder</li> <li>• Short duration variety</li> <li>• Resistant to shoot fly, stem borer, downy mildew, grain mould and rust</li> </ul>	
8.	<i>Kudiraivali</i> ATL 1	DHBM 99-6 x RBM 36	90 days	<ul style="list-style-type: none"> <li>• Rainfed: <i>Aadi</i> (June-July) &amp; <i>Purattaasi</i> (September-October)</li> <li>• Grain: 2123 kg/ha; Dry fodder: 3057 kg/ha</li> <li>• Drought tolerant; Non lodging</li> <li>• Iron 5.85 mg/100g</li> <li>• Long, compact, cylindrical and non-shattering panicle</li> <li>• Resistant to stem and borer shoot fly; Moderately resistant to grain smut</li> </ul>	

9.	Panivaragu ATL 2	Selection from IPM 19	65-70 days	<ul style="list-style-type: none"> <li>• Rainfed: <i>Aadi</i> (June–July) &amp; <i>Purattaasi</i> (September–October)</li> <li>• Grain: 2140 kg/ha; Dry fodder: 2793 kg/ha</li> <li>• Short duration; Protein content: 12.0%</li> <li>• Non lodging and suitable for mechanical harvesting</li> <li>• Grains are bold and straw white in colour</li> <li>• Moderately resistant to shoot fly incidence and Resistant to brown spot diseases and moderately resistant to leaf blight</li> </ul>	
10.	Greengram CO 9	CO 6 x COGG 912	65-70 days	<ul style="list-style-type: none"> <li>• Suitable for all seasons</li> <li>• Yield:825 kg/ha</li> <li>• Determinate plant type with synchronized maturity; Suitable for single/ mechanical harvesting.</li> <li>• Protein content: 23.20 %</li> <li>• Shiny and medium bold seeds (4.0 to 4.5 g / 100 seeds)</li> <li>• Moderately resistant to Mungbean Yellow Mosaic Virus and Leaf Crinkle Virus diseases</li> </ul>	
11.	Greengram VBN 6	VBN 2 x IPM 409 - 4	70 - 75 days	<ul style="list-style-type: none"> <li>• Rice fallow (December-January)</li> <li>• Yield:760 kg/ha</li> <li>• Suited for rice fallow condition</li> <li>• Synchronized maturity, non-shattering and amenable for single harvest</li> <li>• Shiny seeds with 100 seed weight of 3.0 to 3.5 grams</li> <li>• High protein (20.63%)</li> <li>• Resistant to Pod borer and White fly; Moderately resistant to Mungbean Yellow Mosaic Virus (MYMV), Powdery mildew and Urdbean leaf crinkle virus diseases</li> </ul>	

12.	Cowpea VBN 4	VBN 1 x VCP 10 - 001	70 - 75 days	<ul style="list-style-type: none"> <li>• <i>Aadi</i> (June-July); <i>Purattaasi pattam</i> (September-October)</li> <li>• Irrigated: 1377 kg/ha; Rainfed: 1035 kg/ha</li> <li>• Determinate plant type with synchronized maturity</li> <li>• Large seeds with 100 seed weight of 9.5-11.0 g</li> <li>• High fibre (5.6 %) and protein (18.6 %)</li> <li>• Resistance to pod borer and Bean Common Mosaic Virus (BCMV) disease.</li> </ul>	
13.	Sunflower hybrid COH 4	COSF12A x IR 6	90-95 Days	<ul style="list-style-type: none"> <li>• <i>Aadi</i> and <i>Karthigai-Margazhi pattam</i></li> <li>• Irrigated: 2182 kg/ha; Rainfed: 1898 kg/ha</li> <li>• High volume weight (46 g/100ml)</li> <li>• High oil content (40-42 %)</li> <li>• Moderately resistant to sucking pest, leaf feeders, powdery mildew and <i>Alternaria</i></li> </ul>	
14.	Sesame VRI 5	VRI 3 x EC 370840	75- 80 days	<ul style="list-style-type: none"> <li>• Dec. – Jan. and Feb. – March</li> <li>• Yield:795 kg/ha</li> <li>• Monostem type suitable for high density sowing and mechanical harvesting</li> <li>• White seeded; 52% oil and 23.8% protein content</li> <li>• Moderately resistant to sucking pests, capsule borer, dry root rot, phyllody and powdery mildew diseases</li> </ul>	
15.	Sugarcane Co 18009 (Punnakai)	Co 07027 x ISH 69	12 months	<ul style="list-style-type: none"> <li>• December – March (Mid/Late season)</li> <li>• Cane yield: 160.39 t/ha; Sugar yield: 20.71 t/ha</li> <li>• Good ratooner</li> <li>• Suitable for jaggery production</li> <li>• Drought tolerant; Suitable for machine harvesting</li> <li>• Less susceptible to shoot borer (&lt; 15%) and internode borer (&lt; 30%); Moderately resistant to red rot.</li> </ul>	

16.	Sunnhemp ADT 1	Intercross of SH4, CO 1, SUIN 053 & JRJ 610	120 days	<ul style="list-style-type: none"> <li>• Green manure: All seasons; Seed production: Dec. - Jan., March - April</li> <li>• Yield:20.8 t/ha</li> <li>• High biomass</li> <li>• Less infestation by pests and diseases</li> </ul>	
17.	Ridge Gourd MDU 1	Virudhunagar local x Periyakottai local	120 -130 days	<ul style="list-style-type: none"> <li>• June – July and December - January under irrigated conditions</li> <li>• Yield:18.75 tons/ha</li> <li>• Medium sized fruits (29-30 cm length) with soft pulp</li> <li>• 10-15 pickings can be made in four months duration.</li> <li>• Suitable for preparation of jam, <i>thokku</i> and pickles.</li> <li>• Field tolerant to fruit fly</li> </ul>	
18.	Winter Jasmine CO 1	Selection from Karamadai local	Perennial	<ul style="list-style-type: none"> <li>• Year-round flowering</li> <li>• Yield:8.52 tons/ha</li> <li>• Profuse flowering during off-season (Oct- Feb).</li> <li>• Attractive bright pink bold buds with good keeping quality.</li> <li>• Flowers have mild fragrance.</li> <li>• Free from red spider mite; low level of thrips infestation; Moderately resistant to leaf spot under field condition</li> </ul>	
19.	Bush Lab lab CO 16	Lp (b) 03 x Lp (b) 36	100 – 120 Days	<ul style="list-style-type: none"> <li>• June – July and October – November</li> <li>• Yield:16.5 t/ha</li> <li>• <i>Kozhikkaal avarai</i> type</li> <li>• Photo-insensitive and suitable for year round cultivation.</li> <li>• Early bearing with 50-55 days for first harvest</li> <li>• 12-15 pickings can be made in four months duration</li> <li>• Less infestation by <i>Maruca</i> pod borer (5.5%)</li> </ul>	

20.	Silk Cotton MTP 1	Selection from Melachokkanat hapuram local	4 years up to 40 years	<ul style="list-style-type: none"> <li>• All seasons (Throughout the year)</li> <li>• Yield:900 – 1500 pods/tree</li> <li>• Fast growing and short rotation</li> <li>• Suitable for all agro-forestry systems</li> <li>• Medium sized pods densely packed with flosses</li> <li>• No major incidence of pests and diseases except stem borer</li> </ul>	
21.	Red sanders MTP 1	Selection from Ammur local	15-18 years	<ul style="list-style-type: none"> <li>• All seasons (Throughout the year)</li> <li>• Yield:100 kg heartwood/tree</li> <li>• Wood is heavy, strong with wavy grain and dark brown</li> <li>• High santalin content</li> <li>• No incidence of major pests and diseases</li> </ul>	
22.	<i>Casuarina</i> MTP 3	<i>Casuarina equisetifolia</i> × <i>C. junghuhniana</i>	3 years	<ul style="list-style-type: none"> <li>• For all seasons (Throughout the year)</li> <li>• Yield:162 tonnes/ha</li> <li>• High holocellulose (75.8%) and wood density</li> <li>• Multifarious industrial utility</li> <li>• No incidence of major pests and diseases</li> </ul>	
23.	Khaya MTP 1	Selection from Mettupalayam local (African Mahagony)	5-6 years	<ul style="list-style-type: none"> <li>• For all seasons (Throughout the year)</li> <li>• Yield:150 tonnes/ha</li> <li>• Cylindrical stem</li> <li>• Multipurpose tree</li> <li>• No incidence of major pests and diseases</li> </ul>	

### Contact details for seed/planting material:

Agricultural crops	Sugarcane	Horticultural crops	Forest tree crops
<b>The Director</b> Centre for Plant Breeding and Genetics Tamil Nadu Agricultural University Coimbatore – 641 003 Phone: 0422-6611215, 6611318	<b>The Director</b> ICAR-Sugarcane Breeding institute Coimbatore – 641 007 Phone: 0422-2472621 E mail: director@sugarcane.res.in	<b>The Dean</b> Horticultural College and Research Institute Tamil Nadu Agricultural University Coimbatore – 641 003 Phone: 0422-6611270,	<b>The Dean</b> Forest College and Research Institute Tamil Nadu Agricultural University Mettupalayam -641 301 Phone: 04254-222010, 225064

E mail: directorcpbg@tnau.ac.in		6611371 E mail: deanhortcbe@tnau.ac.in	E mail: deanformtp@tnau.ac.in
---------------------------------	--	--	-------------------------------

### Technologies developed 2023

S. No.	Name of the technology
1.	TNAU's Village level Medium Range Weather Forecast
2.	TNAU seed coating formulation technology
3.	TNAU seed pelleting technology
4.	Stage-Specific Inoculants for Rice
5.	<i>Bacillus altitudinis</i> FD 48 for drought, plant growth and yield in rice
6.	Seed cubes for propagation of tree / vegetable crops
7.	Horizontal roughing filter for sediment removal for open well recharge
8.	Pyrolysis process for fuel oil production from waste plastics
9.	Red manila tamarind squash from PKM 2
10.	Preparation of functional food products from Hibiscus ( <i>Hibiscus rosa-sinensis</i> )

### Farm implements/ Machineries developed 2023

S. No.	Name of Farm implements/ Machineries
1.	Manual Operated Sugarcane Mother Shoot Cutter for Sustainable Sugarcane Initiative
2.	Development of Power Hoe cum Ridger for narrow spaced crops
3.	Moringa De-podding Machine
4.	Forced combustible cook stove
5.	Tractor operated planter for Tissue Culture Banana
6.	On-farm Hermetic Storage System for Dehulled Millets

**Public Relations Officer**