

Dr. P. Murali Arthanari Ph.D., Public Relations Officer Mobile: 94890 56730 Phone: 0422 - 6611302 Fax: 0422 – 2431821 E-mail: <u>pro@tnau.ac.in</u>



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То

The Editor,

Sir,

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

TNAU Released New Crop Varieties for 2022

The Tamil Nadu Agricultural University, Coimbatore is known for its academic and research excellence, releasing improved crop varieties in agriculture and horticulture crops to suit different kinds of agro-climatic conditions of Tamil Nadu and to the farmers to overcome the constraints like low yield, drought, pest and diseases and difficulties in farm mechanization. As a continued efforts to sustain farm productivity and profitability, TNAU releases 17 crop varieties inclusive of 9 varieties in agricultural crops and 8 in horticulture to **Farmers of Tamil Nadu** to benefit the farmers and to increase the Tamil Nadu Agricultural Production.

Dr. A.S. Krishnamoorthy, Acting Vice Chancellor, TNAU, Coimbatore informed that, the 52nd State Variety Release Committee under the chairmanship of Agricultural Production Commissioner (APC) & Secretary to the Government Shri. C. Samayamoorthy, IAS has recommended the following **17 crop varieties for adoption in the state**.

- 1 Rice CO 55
- 2 Rice ADT 57
- 3 Rice TKM 15
- 4 Rice TRY 5
- 5 Blackgram ADT 7
- 6 Greengram VBN 5
- 7 Groundnut VRI 9
- 8 Groundnut VRI 10
- 9 Sugarcane COG 7

- 10 Banana CO 3
- 11 Jackfruit PKM 1
- 12 Jamun PKM 1
- 13 Brinjal MDU 2
- 14 Lab Lab CO 15
- 15 Elephant Foot Yam CO 1
- 16 Turmeric BSR 3
- 17 Coriander CO 5

VARIETIES : AGRICULTURE

1. Rice CO 55

It is a derivative of ADT 43 x GEB 24 and short duration superfine variety with 115 days. The average yield of the culture is 6050 kg/ha. It has milling of 66% and head rice recovery of 62%. This variety is suitable for Sornavari / Kar / Kuruvai / Navarai in Tamil Nadu. It is medium slender fine rice with cooking quality.



2. Rice ADT 57

It is a derivative of ADT 45 x ACK 03002> It is a medium slender rice with 115 days. The average yield of the culture is 6500 kg/ha. It has milling of 69% and head rice recovery of 60%. This variety is suitable for Sorrnavari / Kar / Kuruvai / Navarai in Tamil Nadu. It is suitable for cooking.



3. Rice TKM 15

This variety is derived from TKM 12 x IET 21620. It is a short duration drought tolerant variety with 115-120 days. The average yield of the culture is 4200 kg/ha. It has milling of 68% and head rice recovery of 63%. The variety is suitable for direct sowing semi dry condition during north east monsoon (September – October) in north and southern

districts. It is a medium slender rice with cooking quality. The physiological parameters for drought tolerance and water stress are observed in this variety.



4. Rice TRY 5

It is a mutant of TRY 2 and short duration variety with 110 - 115 days. The average yield of the culture is 5100 kg/ha. It has milling of 64% and head rice recovery of 54%. The variety is suitable for Kuruvai / Late thaladi / Navarai seasons. It is a medium slender fine rice with cooking quality. It is suited to salt affected soils.



5. Blackgram ADT 7

It is mutant of ADT 3, with duration of 65 - 70 days. The average yield of the culture is 724 kg/ha. It is a rice fallow variety like ADT 3, ADT 6 and VBN 9.



6. Greengram VBN 5

It is a derivative of VBN (Gg)2 x ML 1451 and with 70 - 75 days duration. The average yield of the culture is 870 kg/ha. It is resistant to Mung bean yellow mosaic virus. The variety is suitable for kharif, rabi and summer seasons.



7. Groundnut VRI 9

It is a Spanish bunch variety derived from VG 0420 x VRI Gn6. It has duration of 115 days. The average yield of culture is 2500 kg/ha. The oil content of the culture is 47-90% with seed viability. It has no *in-situ* germination of matured pods observed before harvest. It has moderate resistance to late leaf spot and rust besides thrips and leaf hopper. The variety is suitable for Chittrai, Adi and Aippasi pattam under rainfed and Margazhi pattam under irrigation.



Field view of Groundnut VRI 9



Single plant, pod, kernel of Groundnut VRI 9

8. Groundnut VRI 10

This variety is developed from VRI 2 x NRCG CS 349. It is a Spanish bunch shorter duration variety with 95 days. The average yield of culture is 2530 kg/ha. The oil content is 48% with seed viability. It has no *in-situ* germination of matured pods observed before harvest. It has moderate resistance to late leaf spot and rust besides thrips and leaf hopper. The variety is suitable for Chittrai, Adi and Aippasi pattam under rainfed and Margazhi pattam under irrigation.



Single plant, pod, kernel of Groundnut VRI 10

9. Sugarcane COG 7

It is a clonal selection from 89 V 74 mother clone. It is a mid late season variety with duration of 12 months. The average sugarcane yield is 134 ton/ha under normal soil condition and 126 ton/ha under salt affected soils. It is observed as moderately resistant to red rot.



VARIETIES : HORTICULTURE

10. Banana CO 3

This banana variety is developed from a cross of Karpooravalli x H201. It has a duration of thirteen months. The average yield is 21 kg/plant, Its average bunch weight is 21 kg and possessed with 10-11 hands 16 fingers/fruits. The fruit is bright yellow without ashy coating. It has field tolerance to root lesion nematode attack.



11. Jackfruit PKM 1

It is a clonal selection from identified trees, fruit weight 21 kg. The average yield of culture is 2.3 tonnes/tree/year. Yield 156 plants/ha and twice during March – May and November – December. The variety is suitable for tropical and sub tropical areas.





12. Jamun PKM 1

This tree crop is developed from a clone selected from germplasm. It is semi spreading tree with drooping branching habit. It has large size fruit with 17g. The average yield is 82 kg/tree/year. It has high anti-oxidant propertis, Potassium, Iron and Vitamin C. The variety is suitable for planting in dry tracts including waste land.



13. Brinjal MDU 2

It is a derivative of ACM SM 9 x Annamalai 1 brinjal. The crop duration is 140 days. The average yield is 31 t/ha. The variety is suitable for cultivation in June – September and November – February. It has moderate resistantance to phytoplasma diseases and shoot fly incidence.



14. LabLab CO 15

It is derivative of LP (P) 17 x LP (P) 6 and Pole type lab lab. The average yield is 14 kg. The harvest of green pods starts from 70 days and continue upto 240 days with 25 harvests.



15. Elephant Foot Yam CO 1

This variety is developed from clonal selection. It has duration of 240 days. The average yield is 50 t/ha. The planting season is February to March. The variety is suitable for Salem, Nammkkal, Erode, Ariyalur, Thirupur, Dindigul, Cuddalore, Theni, Krishnagiri and Dharmapuri.





16. Turmeric BSR 3

It is a clonal selection from Baguthampalayam. The duration is 240-250 days and planting season is May – June. The average rhizome yield is 51 t/ha. It has higher Curcumin content of 4.8% BSR 1 and CO 2 vareities. It is suitable for cultivation in the districts of Coimbatore, Tirupur, Erode, Salem, Dharmapurai and Krishnagiri. It has moderate resistant to leaf spot and leaf blotch diseases.



17. Coriander CO 5

It is a selection from ermplasm. This is suitable for cultivation in Kharif and Rabi seasons. The duration is 35 - 40 days for green leaf harvest. The average green leaf or herbage yield is 4.7 t/ha. It has essential oils like other varieties and linalool content is higher than CO (CR) 4.



B. TECHNOLOGIES

1. Zinc solubilising bacteria as inoculants for Zn nutrition and biofortification

Zinc solubilizing bacterial strains capable of solubilizing insoluble form of Zn into soluble form and thereby the Zn availability to the is made crop available throughout the crop period. ZSB inoculation ensures Zn availability, reduces $ZnSO_4$ application (50%), enhances the Zn uptake and fortifies the Zn in rice grains. The biofertilizer is a supplement for Zn nutrition to rice and other crops.

2. Optimization of N, P and K requirement for Barnyard millet (*Echinochloa frumentacea* (Roxb.) Link) in Red and Black Soils

The optimal NPK (50:15:15) dose for Barnyard millet will help in optimal and balanced application and increase the yield of 20% in light textured red soil with BC ration 2.36. In heavy textured black soil application of NPK @ 40:15:15 increase the yield of 17% with BC ratio of 2.41

3. Muskmelon Fruit Power

Muskmelon Fruit Power is rich in muskmelon flavor. It can be used for the preparation ready to use food mixes such as instant drinks, milk shake power, ice cream and health mixes. It is preferred by the consumers.

4. Nodule Associated Plant Probiotics for Blackgram

The blackgram root nodule endophypic yeast assist rhizobium species / nitrogen fixing bacteria in legumes to fix more nitrogen from atmosphere into root nodule and promote the plant growth in multifarious ways. It is increasing the crop yield as well as maintenance of soil health. The technology given Benefit Cost Ratio ratio of 2.53.

C. FARM IMPLEMENTS

1. Colour sorter and grader for spherical fruits and vegetables

Colour sorter and grading machine is very useful in grading size of the fruits/nuts mango, coconut, tomato etc. and also simultaneously sorting with the colour. The capacity of machine is 40 kg/hour. It can be used for sorting either for colour / size or combing both. It enhancing the market value of commodity.



2. Compound Parabolic Solar Dryer

Parbolic solar dryer is an excellent approach to dry the farm produce utilizing nonconventional energy. It reduces 50% reduction of drying time, retention of quality and nutritional characteristic of dried product. The product is solar dryer fetches higher value in the market.



Compound Parabolic Solar Dryer exercic university giftum.er/ddf

3. Domestic Solar Dryer

Domestic solar dryer is a small-scale household unit to dry green produce like leaves / vegetables / grains utilizing non-conventional energy. This unit facilitates reduction of half of the drying time compared to sun drying.



4. Multi row weeder attachment to riding type rice transplanter

Multi-row weeder is an attachable mechanized unit to the rice transplanter. It can be used for weeding operation once or twice during vegetative stage of the paddy crop. It is an alternative to manually operated cono weeding unit. This mechanized operation will facilitate easy adoption of SRI technology. It can cover 2.5 to 3.0 hec/day.



Weeder attachment to paddy transplanter நெல் நடவு இயந்திரத்தினால் இயங்கும் களையெடுக்கும் கருவி

5. Mini Tractor operated bush cutting machine

Mini tractor mounted bush cutter is useful for campus cleaning and lawn maintenance. It can cut the grasses and clearing bushes in the grounds / lawns / roads etc. It can cover 0.12 hec/hour. It saves 17% of the cost than compared to manual cutting.



Mini tractor operated brush cutter சிறிய டிராக்டரால் இயங்கும் புதர் வெட்டும் இயந்திரம்

Dr. A.S. Krishnamoorthy, Acting Vice-Chancellor, Tamil Nadu Agricultural University told that University released 865 crop varieties in the past 100 years and in addition 17 varieties released this year. The varieties are suitable to different agro climatic zones and meeting the demand of farmers. The farmers are requested to cultivate the varieties and take the benefit of new varieties.

Public Relations Officer