

புதிய பயிர் இரகங்கள் மற்றும் புதிய பண்ணைக்கருவிகள்

NEW CROP VARIETIES AND AGRICULTURAL IMPLEMENTS

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தொகுப்பு Compiled by

ஆராய்ச்சி இயக்ககம் தமிழ்நாடு வேளாண்மைப் பல்கலைக்கழகம், கோயம்புத்தூர்

DIRECTORATE OF RESEARCH

TAMIL NADU AGRICULTURAL UNIVERSITY

COIMBATORE – 641 003

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1. Rice TKM 13



Derived from the cross of two rice varieties *viz.*, WGL 32100 / Swarna, TKM 13 variety has medium slender fine grain with lesser 1000 grain weight (13.5 g). It matures in 130 days which is 7-10 days earlier than BPT 5204. The average grain yield of this variety is 5938 kg/ha which is 6.2 and 10.1 per cent increase over CO (R) 49 and BPT 5204 respectively. TKM 13 is moderately resistant to leaf folder, stem borer, green leaf hopper, blast, rice tungro disease, brown spot and sheath rot. This variety has high milling yield (75.5%) and head rice yield (71.7%), which is on par with the check variety BPT 5204.

2. Rice CR 1009 Sub1



This is an improved version of CR 1009 with *Sub 1* gene conferring submergence tolerance at seedling level for 15 days immediately after transplantation and the work was undertaken at International Rice Research Institute (IRRI), Philippines. This variety has given a mean grain yield of 5759 kg/ha in 155 days with moderate resistance to brown spot, blast, brown plant hopper (BPH) and white backed plant hopper (WBPH). This long duration variety is suitable for *samba* season for the long duration rice cultivating tracts of Tamil Nadu which are prone to flood. CR 1009 sub 1 possesses short bold rice with high milling percentage and head rice recovery. Rice contains high amylose with intermediate gelatinization temperature and soft gel consistency which is suitable for idly making and this variety is recommended as an alternate to CR 1009.

3. Rice MDU 6



Derived from the cross MDU 5 / ACM 96136, this variety matures in 110-115 days and yields 6118 kg/ha in irrigated condition. Highest yield of 9388 kg/ha was recorded at Ayyampalayam, Erode District. It has long slender which rice with intermediate amylose content, gelatinization temperature and high linear elongation ratio on cooking, superior cooking quality with good taste and highly suitable for raw rice, variety rice, aval and pori making. This variety is suitable for cultivation as transplanted rice throughout Tamil Nadu except Nilgiris district.

4. Sorghum K 12



This is a dual purpose sorghum variety maturing in 95 days. Tolerating drought, K 12 can yield on an average of 3123 kg/ha of pearly white grains and 11.9 t/ha of dry fodder yield. It has yielded upto 5300 kg/ha in Senkottai of Tirunelveli District. This photo insensitive variety is moderately resistant to shootfly, stemborer and reistant to downy mildew. This variety is suitable for cultivation in rainfed vertisol tracts of southern districts of Tamilnadu and also suitable for summer irrigated tract of Tenkasi region.

5. Wheat CO W 3



This is a high yielding bread variety suitable for southern hill zones and adjoining areas in Tamil Nadu under restricted irrigation as a best alternative winter cereal. This variety recorded 12 per cent increased yield (4076 kg/ha) over the check COW(W)1 (3641 kg/ha) in a total of 131 trials and has the ideal plant height (90 cm) with erect plant type, strong and resilient stem providing resistance to lodging. It also possesses high degree of resistance to stem, leaf and stripe rusts under both artificial and natural epiphytotic conditions.

6. Cluster bean MDU 1



This culture is the first release in cluster bean from Agricultural College & Research Institute (AC&RI), Madurai. It has a cluster bearing nature (7-9 fruits/node) with long attractive green colored fruits measuring 13-14 cm. Plant matures in 90-100 days and has more number of fruits / plant (150-175 fruits) with an attainable yield of 250-300 g/plant. Fruits are rich in fiber content (4.5g/100g of the fruit) and the plants can tolerate powdery mildew.

7. Coconut hybrid VPM 5



This is the first hybrid of Tall x Tall type to be released in India. This hybrid has Laccadive Ordinary Tall (LCOT) as female parent and Cochin China Tall (CCNT) as male parent. This hybrid comes to bearing from 48-50 months onwards and reaches stabilized bearing from 8 - 10 years onwards and likely to bear economically up to 60 years at least. On an average, it yields 161 nuts/tree/year and a copra content of 24.12 kg / palm / year.

8. Tractor drawn turmeric rhizome planter



This unit can be operated by 35-45 hp tractor which has the facility to plant three rows at a time in the required spacing. Row spacing is adjustable and can cover 1.2 ha per day. Cost of the unit is Rs.50,000/-.

9. Hydraulic brake for two wheel tractor trailer system



The two wheel tipping trailers are not provided with any separate brake arrangement for stopping the trailer. They are stopped by the braking action of the tractor alone. When brakes are applied to a tractor with a loaded two wheel tipping trailer, the tractor first stops and then the trailer rams into the tractor and stops due to its inertia. This causes potential jack knifing situation leading to subsequent over turning. Realizing the situation, the Government of India has issued a Govt. notification dated 11.04.2014 insisting for making provisions in the tractor for taking hydraulic drive to operate the trailer brakes. This hydraulic brake system is powered by tractor hydraulic internal gear pump with a flow rate of 32 lpm (at engine rated rpm). Trailer braking and tipping control systems are provided for smoother braking of the two wheel trailer attachment. The additional cost involved in providing the hydraulic brake system is Rs.41,000/-.