1. RICE – CO(R) 48

Special features

- Medium slender white fine rice similar to Improved White Ponni
- Intermediate amylose content, gelatinization temperature and high linear elongation ratio on cooking
- Superior cooking quality
- Moderately resistant to stem borer and hoppers, blast, RTD and sheath blight

Parentage: CO 43 / ASD 19

Duration (days): 130 – 135

Season: Thaladi

Grain yield

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6007</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% increase over</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.W. Ponni</td>
</tr>
<tr>
<td>BPT 5204</td>
</tr>
</tbody>
</table>

Highest yield obtained: 9625 kg/ha

Area of adoption: Throughout Tamil Nadu except Virudhunagar, Ramanathapuram, Sivagangai and Nilgiris districts
2. PANIVARAGU – CO (PV) 5

Special features
- High grain yield, profuse tillering and non-lodging
- Drought tolerant and short duration
- Preferable grain qualities
- Palatable straw
- No pest and diseases incidence in normal sowing season. Grain smut, rust, brown spot and shootfly infection and dead heart symptoms are relatively less when compared to CO 4
- Highly nutritive grains with acceptable cooking qualities and value addition

Parentage : PV 1403 / GPUP 21
Duration (days) : 70
Season : Rainfed: Adipattam (June – July)
          Purattasipattam (Sept. – Oct.)
**Yield**

<table>
<thead>
<tr>
<th></th>
<th>Grain</th>
<th>Straw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kg / ha</td>
<td>2381</td>
<td>6675</td>
</tr>
<tr>
<td>% increase over</td>
<td>24.4</td>
<td>9.1</td>
</tr>
<tr>
<td>CO 4</td>
<td>35.0</td>
<td>15.1</td>
</tr>
</tbody>
</table>

Highest yield obtained: 3951 kg/ha

Area of adoption: Rainfed drylands, hill and tribal areas in Salem, Namakkal, Villupuram, Dindigul and Erode districts of Tamil Nadu. Low rainfall and low fertile soils in the marginal and sub-marginal rainfed drylands, hill and tribal areas in Tamil Nadu.
3. BLACKGRAM – VBN (Bg) 5

Special features

- Higher grain yield than the check varieties viz., VBN 3, VBN (Bg) 4 and ADT 5
- Suitable for both rainfed and irrigated condition. Under high fertility level, there is no vegetative growth as that of VBN (Bg) 4
- No incidence of Yellow Mosaic Virus throughout the year while VBN 3 and ADT 5 are susceptible during summer season

Parentage: Vamban 1 / UK 17

Duration (days): 65 – 70

Season:
- June – July - Adipattam
- Sep. – October - Purattasi pattam
- February – March - Thai pattam

Yield

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th>820</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>VBN 3</td>
<td>12.32</td>
</tr>
<tr>
<td>ADT 5</td>
<td>22.02</td>
</tr>
<tr>
<td>VBG (Bg) 4</td>
<td>9.33</td>
</tr>
</tbody>
</table>

Highest yield obtained: 1212 kg/ha

Area of adoption: Suitable for growing in all the seasons and all regions of Tamil Nadu
4. AVARAI – CO (Gb) 14

Special features
- Attractive green colour pods
- High density planting because of erect and compact plant type
- Clipping not required
- Can be grown throughout the year
- Tolerates / compensates the damage of spotted pod borer
- Resistant to root rot and moderately resistant to Anthracnose

Parentage : CO 9 / CO 4

Duration (days) : 70 –75 (Vegetable crop)
                 80 – 85 (Seed crop)

Season : Adipattam (June – July)
         Purattasipattam (Sept. – Oct.)
         Thaipattam (Feb. – March)
**Yield (Tender pods)**

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th>7984</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td>22.49</td>
</tr>
</tbody>
</table>

Highest yield obtained: 13194 kg/ha

Area of adoption: Coimbatore, Salem, Dharmapuri and Krishnagiri districts of Tamil Nadu
5. GROUNDNUT – VRI (Gn) 6

**Special features**
- Basal pod setting
- Tolerant to drought
- High shelling (75%)
- High oil content (50%)
- Small pods with rose kernels
- Moderately resistance to late leaf spot, rust and Peanut Bud Necrosis Disease (PBND)

**Parentage**: Hybrid derivative of ALR 2 / VG 9513

**Duration (days)**: 100 – 105

**Season**: Rainfed: June-July
Irrigated: December – January

<table>
<thead>
<tr>
<th>Yield</th>
<th>Rainfed</th>
<th>Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kg / ha</td>
<td>1916</td>
<td>2403</td>
</tr>
<tr>
<td>% increase over VRI 2</td>
<td>10.5</td>
<td>13.5</td>
</tr>
</tbody>
</table>

Highest yield obtained: 5200 kg/ha

**Area of adoption**: Rainfed and irrigated tracts of Tamil Nadu.
Red laterite / sandy soil
6. TAPIOCA – CTCRI CO (Tp) 5

Special features
- Resistance to cassava mosaic disease
- Fairly food starch content (28%)
- Moderate tuber yield (38 t/ha)
- Erect and top branching habit
- Regular flowering and seed setting
- Tubers long, cylindrical, white flesh easy pealability and low in cyanoglucoside

Parentage : It is an exotic germplasm introduced from CIAT, Cali, Colombia (MNga-1). It is one of the hybrid lines produced for resistance to African Cassava Mosaic Disease at IITA, Nigeria, having the code No.TMS/30001

Duration (days) : 270 – 300
Season : June – July; October – November

<table>
<thead>
<tr>
<th>Yield (t / ha)</th>
<th>38</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>Sree Visakham</td>
<td>Yield on par</td>
</tr>
</tbody>
</table>

Highest yield obtained : 38 t/ha

Area of adoption : Adapted to loamy and sandyloam soils of Salem, Namakkal, Dharmapuri, Erode, Tirunelveli districts of Tamil Nadu and laterite soil of Kerala

7. WHITE LONG SNAKE GOURD – PLR (SG) 1

Special features
- This variety is suitable for cultivation under irrigated conditions only
- Excellent cooking quality due to less fibre and high flesh content and does not twist due to maturity

Parentage : Pure line selection of white long type

Duration (days) : 135

Season : June – September, November – March and April – May

Yield

<table>
<thead>
<tr>
<th>t/ha</th>
<th>35 – 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>CO 1</td>
<td>30.5</td>
</tr>
</tbody>
</table>

Highest yield obtained : 46.5 t/ha
Area of adoption: Cuddalore, Villupuram, Vellore, Tiruvannamalai, Kancheepuram, Tiruvallur and Perambalur districts of Tamil Nadu. Well drained, organic matter rich, sandy loam soil

8. BHENDI HYBRID – COBhH 1

Special features
- Plants are 110-120 cm tall
- Fruits are dark green, long and tender. About 21-29 fruits are borne per plant
- High yielding and resistant to yellow vein mosaic virus disease
- Suitable for cultivation without pesticide spray

Parentage: VU Selection / PA 4 (T)

Duration (days): 120

Season: May – June, November – December and February – March
Yield

<table>
<thead>
<tr>
<th></th>
<th>22.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>t/ha</td>
<td></td>
</tr>
<tr>
<td>% increase</td>
<td></td>
</tr>
<tr>
<td>Arka Anamika</td>
<td>47.3</td>
</tr>
<tr>
<td>M 10</td>
<td>16.3</td>
</tr>
</tbody>
</table>

Highest yield obtained : 26.1 t/ha
Area of adoption : Coimbatore, Dharmapuri, Erode, Kancheepuram, Madurai, Namakkal, Pudukkottai, Ramanathapuram, Salem, Sivagangai, Thanjavur, Trichy, Thiruvannamalai, Villupuram and Vellore districts under irrigated condition

9. SAPOTA – PKM (Sa) 5

Special features
- High yielder, High Total Soluble Solids (25.5° brix) and suitable for preparation of dry flakes, milk shake powder and mixed fruit jam.
• Leaves are waxy, narrow, small, upright and arranged in whorl form in cluster and rich in proline content, relative water content, epicuticular wax and chlorophyll stability index.
• Suitable for vertisols, water stagnated and drought areas.
• Oval shaped attractive fruits with smooth, light brown skin which facilitates a good market appeal.
• Flesh is crisp and retains coppery brown colour while other sapota varieties turn dark brown after ripening.
• Since the fruits are heavier with coloured flesh than other varieties, it is highly suitable for making flakes, powder and mixed fruit jam.
• It shows field tolerance to leaf spot and leaf webber incidences.

Parentage : It is a selection from open pollinated seedlings maintained in a private orchard at Virudhunagar

Duration (days) : Perennial
Season : June – October
Yield

<table>
<thead>
<tr>
<th></th>
<th>Vertisol</th>
</tr>
</thead>
<tbody>
<tr>
<td>t / ha</td>
<td>18.70</td>
</tr>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>PKM 1</td>
<td>19.06</td>
</tr>
<tr>
<td>PKM 4</td>
<td>17.97</td>
</tr>
</tbody>
</table>

Highest yield obtained : 18.88 t / ha

Area of adoption : Well adapted to the vertisol soils of Southern Tamil Nadu and water stagnated and drought prone areas
10. JACK – PLR (J) 2

**Special features**

- Good quality and bigger sized fruits
- Highly palatable and edible flakes
- Will fetch more price due to attractive characters and keeping quality resulting in increased income to the farmers
- Less incidence of major pest and diseases

**Parentage** : It is a clonal selection from Pathirakkotai Local

**Duration (days)** : Perennial

**Season** : June – December
Yield

<table>
<thead>
<tr>
<th></th>
<th>No.</th>
<th>Kgs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruits/tree/year</td>
<td>95-110</td>
<td>1600-1950</td>
</tr>
<tr>
<td>% increase over</td>
<td>29.0</td>
<td>114</td>
</tr>
<tr>
<td>Highest yield obtained</td>
<td></td>
<td>1950 kg/tree/year</td>
</tr>
</tbody>
</table>

Area of adoption: Suitable for growing in tropical climates. Deep well drained loam soil