Year of Release 2006

1. HYBRID RICE - CORH 3

Special features

- Early duration (115 days)
- High yield potential
- Medium slender white grain with good cooking and keeping quality
- Tolerant to blast and RTD
- Resistant to GLH and tolerant to WBPH and BPH
- Synchrony in flowering of the parents

Parentage: TNAU CMS 2A / CB 87 R
Duration (days): 110 – 115
Season: Kar / Kuruvai / Sornawari / Navarai

Grain yield

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th>6475</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>ADT 39</td>
<td>24.3</td>
</tr>
<tr>
<td>ADT 43</td>
<td>28.4</td>
</tr>
<tr>
<td>ADTRH 1</td>
<td>13.2</td>
</tr>
</tbody>
</table>

Highest yield obtained: 10972kg/ha
Area of adoption: Throughout Tamil Nadu under irrigated transplanted condition
2. RICE – RMD (R) 1

Special features
- Suited for rainfed direct seeding
- Short duration
- High yielder under rainfed direct seeding
- Drought tolerant
- Semi dwarf, non-lodging and non-shattering habit
- Long bold white rice with 1000 grain weight of 24.3 g
- High amylase content (25.6%) and head rice recovery (59%)
- Resistant to stem borer and leaf folder
- Tolerant to bacterial leaf blight, blast and sheath rot

Parentage : Selection from TGR 75R
Duration (days) : 100-105 days
Season : September – October (Rainfed direct sowing)

Grain yield

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th>4000</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>PMK 2</td>
<td>20.1</td>
</tr>
<tr>
<td>PMK 3</td>
<td>21.8</td>
</tr>
<tr>
<td>MDU 5</td>
<td>25.5</td>
</tr>
</tbody>
</table>

Highest yield obtained : 5134 kg/ha^{-1}
Area of adoption : Ramanathapuram, Sivagangai and Thiruvallur districts under rainfed rice cultivation ecosystem
3. RICE - TPS (R) 4

Special features

- Very early duration with high yield
- Medium bold white rice
- Field tolerance to disease blast, brown spot and sheath blight and stem borer, leaf folder, BPH and GLH

Parentage: TS 29 / ASD 16
Duration (days): 95
Season: Kannipoo (Jun-Sept.) Kumbapoo (Oct.-Feb.)

Grain yield

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th>5840</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>MDU 5</td>
<td>20.0</td>
</tr>
<tr>
<td>ASD 17</td>
<td>27.0</td>
</tr>
</tbody>
</table>

Highest yield obtained: 8050 kg/ha

Area of adoption: Kadaivarambu (tail-end) rice area of canal irrigated system of Kanyakumari district
4. HYBRID MAIZE - COH(M) 5

Special features

- High yielding single cross hybrid
- Resistance to downy mildew disease
- Moderate resistance to stem borer
- Bold, yellow colour grains
- High starch (68.7%) and protein (8.23%)
- Hybrid seed production is easy

Parentage: Single cross hybrid of UMI 285 (Female) and UMI 61 (Male)

Duration (days): 100 – 105

Season:
- Irrigated - Throughout the year
- Rainfed - Puratasipattam (Sept. – Oct.)

Grain yield

<table>
<thead>
<tr>
<th></th>
<th>Irrigated</th>
<th>Rainfed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(kg/ha.)</td>
<td>5400</td>
<td>4280</td>
</tr>
<tr>
<td>% increase over</td>
<td>24.0</td>
<td></td>
</tr>
<tr>
<td>COH(M) 4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Highest yield obtained: 8500 kg/ha

Area of adoption: All maize growing districts of Tamil Nadu
5. SAMAI - CO (Samai) 4

Special features

- Higher yield with bold nutritive grains
- Shorter in duration and drought tolerant
- Suitable for double cropping dryland situation (Samai – Horsegram)
- No pest and diseases incidence in normal sowing season
- Palatable fodder

Parentage: CO 2 / MS 1684
Duration (days): 75-80
Season: Rainfed – Adipattam (June-July)

Grain yield

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th>1567</th>
</tr>
</thead>
</table>

% increase over

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CO 3</td>
<td>14.2</td>
</tr>
<tr>
<td>Paiyur 2</td>
<td>12.7</td>
</tr>
</tbody>
</table>

Highest yield obtained: 2820 kg/ha

Fodder yield: 5783 kg/ha (9.4% over CO 3)

Area of adoption: Dharmapuri, Krishnagiri, Vellore, Tiruvannamalai, Salem, Trichy, Villupuram, Dindigul, Namakkal and Theni districts
6. GREENGRAM - CO (Gg) 7

Special features

- High yielder
- Short duration
- High protein content (25.2%)
- Seeds are medium bold with good cooking quality
- Released as COGG 912 at All India level for Southern Zone and notified by the Central Variety Release Committee

Parentage  :  MGG 336 / COGG 902
Duration (days)  :  62
Season  :  June - July

Yield

<table>
<thead>
<tr>
<th>Kg / ha</th>
<th>% increase over CO 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>978</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Highest yield obtained  :  992 kg/ha

Area of adoption  :  Entire Tamil Nadu
7. MOTH BEAN - TMV (Mb) 1

Special features
- Erect and early maturing variety
- High yield and high protein content (24.8%)
- High fodder yield
- Moderately resistant to white fly, pod borer and yellow mosaic virus disease.

Parentage : Pureline selection from Villupuram local

Duration (days) : 65-70
Season : Rabi (Nov.–Dec.) (Karthigaiappattam)

<table>
<thead>
<tr>
<th>Yield</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kg / ha</td>
<td>933</td>
</tr>
<tr>
<td>% increase over Villupuram Local</td>
<td>30.3</td>
</tr>
</tbody>
</table>

Highest yield obtained : 1830 kg/ha

Dry fodder yield : 3.13 tonnes / ha (16.7% over Local)

Area of adoption : Villupuram District
8. GROUNDNUT - TMV (Gn) 13

Special features

- Tolerance to terminal water stress
- Basal pod setting
- Acceptable pod traits
- Red kernel and high oil content

Parentage: Selection from Pollachi red
Duration (days): 100 – 105
Season: Rainfed and Irrigated

Yield

<table>
<thead>
<tr>
<th></th>
<th>Rainfed</th>
<th>Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kg / ha</td>
<td>1613</td>
<td>2580</td>
</tr>
<tr>
<td>% increase over</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VRI 3</td>
<td>20.4</td>
<td>17.5</td>
</tr>
<tr>
<td>TMV 2</td>
<td>22.4</td>
<td>25.8</td>
</tr>
<tr>
<td>Local Red</td>
<td>24.0</td>
<td>21.8</td>
</tr>
</tbody>
</table>

Highest yield obtained: 4550 kg/ha

Area of adoption: Groundnut growing areas of Tamil Nadu
9. SUNFLOWER – CO (SFV) 5

Special features

- High autogamy (>70 %)
- High oil content (40.3 %)
- High oil yield

Parentage : Derivative of Helianthus annuus / Helianthus praecoex

Duration (days) : 85 – 90

Season : Rainfed and Irrigated

Yield

<table>
<thead>
<tr>
<th></th>
<th>Rainfed</th>
<th>Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kg / ha</td>
<td>1360</td>
<td>1520</td>
</tr>
<tr>
<td>% increase over CO 4</td>
<td>18.5</td>
<td>15.6</td>
</tr>
<tr>
<td>Morden</td>
<td>37.7</td>
<td>34.7</td>
</tr>
</tbody>
</table>

Highest yield obtained : 3550 kg/ha

Area of adoption : Sunflower growing areas of Tamil Nadu
10. COTTON - KC 3

Special features
- Medium duration
- High yielder with a seed cotton yield of 1081 kg/ha
- Good ginning out turn of 37 %
- Medium long staple cotton (26.4 mm)
- Fibre strength : length ratio is 0.81 (CIRCOT norm 0.8)
- Moderately resistant to leafhopper
- Resistant to Alternaria and grey mildew diseases
- Tolerant to drought

Parentage : TKH 497 / KC 1
Duration (days) : 140
Season : September – October (Rabi)

Yield

<table>
<thead>
<tr>
<th>Kg/ha (seed cotton)</th>
<th>1080</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>KC 2</td>
<td>35.3</td>
</tr>
<tr>
<td>MCU 10</td>
<td>35.8</td>
</tr>
<tr>
<td>LRA 5166</td>
<td>30.2</td>
</tr>
<tr>
<td>SVPR 2</td>
<td>63.5</td>
</tr>
</tbody>
</table>

Highest yield obtained : 2146 kg/ha of seed cotton

Area of adoption : Suitable for cultivation in rainfed black cotton soil tracts of Tuticorin, Tirunelveli and Virudhunagar districts during North East monsoon season
11. SUGARCANE - COC (SC) 23

Special features
- Good ratooner and CCS = 12.95%
- Moderately resistant to red rot
- Non-lodging, non-flowering
- Solid cane without brittleness
- Suited for pit method of planting, drip irrigation system and mechanical harvesting
- Drought tolerant
- More fibre content (12.52%), Ideal for Co-generation

Parentage: 69 A 591 GC
Duration (days): 300 – 330
Season: Early and special

Yield

<table>
<thead>
<tr>
<th></th>
<th>Cane</th>
<th>Sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td>t/ha (plant crop)</td>
<td>133.05</td>
<td>17.64</td>
</tr>
<tr>
<td>% increase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO 86032</td>
<td>11.15</td>
<td>13.51</td>
</tr>
<tr>
<td>COC 98061</td>
<td>14.40</td>
<td>23.96</td>
</tr>
</tbody>
</table>

Highest yield obtained: 235.0 t/ha

Area of adoption: Tamil Nadu and Pondicherry, under normal irrigated condition and all soil types
12. TOMATO - COLCRH 3

Special features

- Plants are semi determinate (80-85 cm) and suitable for high density planting
- Fruits are smooth round to slightly oblong, medium sized, unripe fruits whitish green, ripe fruits bright red coloured and borne in clusters of 3-5 fruits (Fruit weight 65-70 g)
- Resistance to leaf curl virus disease
- High yielding and suitable for cultivation without pesticide spray

Parentage : LCR 2 / CLN 2123 A
Duration (days) : 140 -145

Yield

<table>
<thead>
<tr>
<th>t / ha (Fruits)</th>
<th>90.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>COTH 1</td>
<td>22.4</td>
</tr>
<tr>
<td>Lakshmi Hybrid</td>
<td>27.9</td>
</tr>
</tbody>
</table>

Highest yield obtained : 117.3 t / ha
Area of adoption : Coimbatore, Dharmapuri, Salem, Madurai, Namakkal, Thiruvannamalai, Thirunelveli, Thoothukudi, Trichy, Virudhunagar, Villupuram and Erode districts under irrigated condition.
13. CHILLI - KKM (Ch) 1

Special features

- High yielder
- Plants are dwarf, compact and spreading
- Fruits are attractive red in colour and do not shrink much after drying and hence could fetch better price in market
- Relatively high capsaicin content (0.54%), oleoresin content (14.3%) and seed content (49.79 Nos./pod)
- Moderate resistance to fruit rot (Percent Disease Index value 1.10)
- Field tolerance to mosaic disease (Percent Disease Incidence value 3.02)

Parentage : Hybrid derivative of Acc. 240 / CO-3

Duration (days) : 200

Season : September – October

Yield

<table>
<thead>
<tr>
<th>t / ha (Dry pods)</th>
<th>3.03</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over</td>
<td></td>
</tr>
<tr>
<td>PKM 1</td>
<td>35.61</td>
</tr>
<tr>
<td>K 1</td>
<td>38.41</td>
</tr>
</tbody>
</table>

Highest yield obtained : 3.762 t /ha

Area of adoption : Tirunelveli, Thoothukudi, Virudhunagar and Ramanathapuram under garden land condition
14. THYME - OOTY (Tv 1)

**Special features**

- **High green leaf yield potential**
- Leaves possess high thyme oil content (0.7%), local 0.4%. Thyme oil contains 23.63% of thymol chemotype (a major constituent for its medicinal properties), local type contains 20.2%.
- Green and dried leaves possess excellent aroma and cooking quality.
- Resistant to root rot disease, root knot nematode and white flies and aphids.

**Parentage**

: Pureline selection from five germplasm types.

**Duration**

: Perennial and commercially viable upto 4 years.

**Season**

: June – July and Sept. – October (rainfed).

**Yield**

<table>
<thead>
<tr>
<th>t / ha (Green leaves / year )</th>
<th>10.7</th>
</tr>
</thead>
<tbody>
<tr>
<td>% increase over Local</td>
<td>33.7</td>
</tr>
</tbody>
</table>

**Highest yield obtained**

: 11.5 t /ha.

**Area of adoption**

: The temperate zone of the Nilgiris from 900 to 2500 m above MSL and similar areas. Suitable for well drained loamy soil with a PH of 5.5 to 6.5.