

New varieties released and notified by Dr Y.S.R. Horticultural University

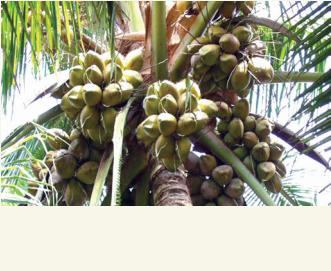
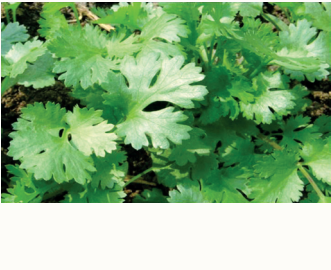
This article describes the 13 high-yielding and disease tolerant hybrids developed by the Dr Y.S.R. Horticultural University and duly approved by the Central Variety Release Committee.

INDIA has clearly emerged as a leading horticultural country of the world with an annual production of more than 300 million tonnes with area grown substantially over the last decade to about 25 million hectares in different agro-climatic conditions. Being second largest producer of fruits and vegetables by small and marginal farmers, Indian horticultural needs to address the challenges like lower productivity, biotic and abiotic stresses, post harvest losses, transport and marketing problems, and non-remunerative prices. It is imperative to address these issues to benefit the farmer with better output and income. Diversification and intensification should be the approach to increase the productivity and net returns per unit area. Dr. Y. S. R. Horticultural University established in 2007 with mandate of location specific Research on development of new varieties/hybrids with high yield potential and effective management practices is working on specific mandate crops at 19 research stations, among them Horticultural Research Station, Lam (chilli and seed

spices); Ambajipeta (coconut); Kovvur and Peddapuram (tuber crops and banana); Ananthapuramu (Arid fruits); Bapatla (cashew) and Tirupati and Petluru (sweet orange and acid lime) have contributed significantly. The impact and popularity created by varieties released by Dr YSR Horticultural University is evident from the area occupied in 60% of area in chilli, 90% of area in spices and substantial area with coconut hybrids.

Diversification aims at shifting from one crop/variety to another and intensification will focus on higher productivity with increased efficiency of inputs. Enhancing productivity through developing high yielding varieties/hybrids with biotic and abiotic stresses resistance through conventional breeding and biotechnological interventions. Improved agro-techniques includes production and supply of quality seed and planting material, reduced cost of cultivation with efficient resources management including automated fertigation, precision farming techniques, mechanisation and energy management.

Crop and Identity (Name of variety/hybrid)	Salient features	States for which released/ notified
Coconut - Vasista Ganga 	- Semi tall with circular crown with trunk girth of 117.1 cm comprising 35.6 leaves per palm - Early bearing comes to first flowering in 40 months - The average mean yield of 125 nuts/palm/year - The average copra output is 3.8 t/ha and oil yield 2.6 t/ha - Good quantity of tender nut water (395 ml) with TSS-7 °Brix	Andhra Pradesh and Karnataka
Coconut - Gauthami Ganga 	- Yields 85-94 nuts/palm/year - Dwarf stature (5.12 m at 22 years) and early bearing, comes to flowering in 36 months after planting - Higher quantity and quality of tender nut water and copra content, i.e. 59 and 26% over East Coast Tall. - It has good combining ability useful for crossing programmes for production of new hybrids - Oil content of 69% with tender nut water of 447 ml with TSS-7.2 °Brix and potassium content of 2035 ppm	Andhra Pradesh

Crop and Identity (Name of variety/hybrid)	Salient features	States for which released/ notified
Coconut - Abhaya Ganga 	• Yields 136 nuts/palm/year • It is a dwarf × tall cross (Gangabondam Green Dwarf × Laccadive Ordinary Tall) • Semi-tall hybrid, early bearing comes to flowering in 38-40 months after planting. Highest oil content (72%) • Recorded an increase in nut yield by 54, copra output by 95 and oil yield by 65% tender nut water content by 24% over local check (ECT) and 17, 10, 29 and 13.3% respectively over hybrid check (ECT × GBGD) • Oil content of 72% • Moderately resistant to bud rot disease	Andhra Pradesh
Coconut - Vynateya Ganga 	• Yields 118 nuts/palm/year • It is a tall × dwarf hybrid (Philippines Ordinary Tall × Gangabondam Green Dwarf) • Semi tall hybrid, precocious comes to bearing in 48 months after planting. It is a dual purpose hybrid for yield (copra and oil) and tender nut water. • Increased nut yield of 47 and 7, copra output of 119 and 22, oil yield of 120 and 17 and tender coconut water content of 23 and 17% over local check (ECT) and hybrid check (ECT × GBGD) respectively • Higher copra content of 190.50 g/nut • Moderately resistant to ganoderma, bud rot and stem bleeding diseases	Andhra Pradesh
Coriander – Suruchi 	• Herbage yield of 3.5-4.5 t/ha greens in off-season (summer) under 50-75% shade net • Herbage yield, 15-18 t/ha in <i>rabi</i> season under open field conditions • The herb can be harvested between 35 and 55 days • Under shade net, yield advantage of 15-30% over existing leafy variety Sadhana • It has volatile herb oil content of 0.15% and leaf essential oil content of 0.032%. • Has very good aroma, comparable to traditional variety Sadhana and better than cilantro types grown commercially.	Andhra Pradesh, Telangana, Tamil Nadu and Rajasthan
Chilli – LCA-620 	• High yielding with an yield advantage of 20-30% over LCA-334 (control) • Plants are tall and erect branching • Medium duration. Seed – seed, 170-190 days • Bears medium long, medium bold sized fruits (9-10 cm length and 3.5-4.0 cm girth) • Yields 6,500-6,800 kg/ha • Bears uniform sized fruits from basal nodes to top or terminal growing point • Bold and medium long pods which make harvesting easy with less labour cost	Andhra Pradesh, Odisha and Chattisgarh
Chilli – LCA-625 	• High yielding chilli variety with an yield advantage of 25-35% over LCA-334 (control) • Plants are erect with tall growing habit and sturdy branching • Medium to long duration 190-210 days • Bears medium long slender sized fruits (8-10 cm) • Yields 6,500-7,000 kg/ha • Suitable for direct sowing among all the available OP varieties and can tolerate drought	Andhra Pradesh

Crop and Identity (Name of variety/hybrid)	Salient features	States for which released/ notified
Chilli – LCH-111 	• High yielding hybrid with an yield advantage of 15-20% over Indam 5 (control) • Plants are tall and erect • Pods are long with shiny bright red colour (13-14 cm length, 3.0-3.5 cm girth) • Yield 7,500-8,000 kg/ha • Besides being a high yielder, resistant to Cucumber Mosaic Virus (CMV)	Andhra Pradesh
Colacasia – Godavari Chema 	• Early maturing high yielding variety with 5 - 5½ months duration • Recommended for cultivation as pure crop and also as intercrop in banana and coconut plantations • Yields 18-20 t/ha	Andhra Pradesh
Fenugreek – Lam Methi-2 	• Average yield, 7-9 q/ha under rainfed conditions and 12-15 q/ha under irrigated conditions • High yielding, growing up to 50 cm with profuse bearing • It is a medium duration which comes to maturity in 80-90 days • Grains are flat, rectangular shaped with attractive brown colour having better market acceptance • Yield advantage of 30-35% over the existing Lam Selection 1 variety	Andhra Pradesh
Cassava –TCMS-5/PDP CMR-1 	• Yield potential is 43-46 t/ha • Semi spreading nature suitable to dense planting. • Medium duration crop with 8 - 9 months • Starch content : 24-26%, Drought tolerant • Completely resistant to cassava mosaic disease (CMD). Tolerant to sucking pests	Andhra Pradesh
Banana – Godavari Bontha 	• Culinary variety and comparatively high yielder than Kovvur Bontha (Check) with 8-9 hands and 90-100 fingers per bunch • Can be grown as pure crop and also as intercrop in coconut orchards • Average bunch weight: 23-24 kg • Tolerant to thrips and aphids and moderately resistant to leaf spot diseases	Andhra Pradesh

Crop and Identity (Name of variety/hybrid)	Salient features	States for which released/ notified
Turmeric – Lavanya 	• High yielding long duration variety • Yield potential: 55-65 t/ha (raw rhizome yield) • Tolerant to leaf spot, leaf blotch and rhizome rot	Andhra Pradesh

Keeping this in view, Dr Y. S. R. Horticultural University has developed 13 varieties/hybrids with high yield potential and resistance/tolerance to biotic and abiotic stresses with good quality were approved by Central Variety Release Committee and notified vide CG-DL-E-08042021-226407 - part II- Section 3 - Sub section (ii) Dated: 07.04.2021 by Ministry of Agriculture and Farmers Welfare, Govt. of India. Dr Y. S. R. Horticultural

University got approved the highest number of varieties/hybrids for notification.

For further interaction, please write to:

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1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH AND WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

8 DECENT WORK AND ECONOMIC GROWTH

SUSTAINABLE DEVELOPMENT GOALS RELATED TO FRUITS AND VEGETABLES

SDGs 2 3

Health benefits of fruit and vegetables

Harness the goodness

Fruit and vegetables have multiple health benefits. They strengthen the immune system, combat malnutrition and help prevent non-communicable diseases.

SDGs 2 3

Diversified diet and a healthy lifestyle

Live by it, a diverse diet

Adequate amounts of fruit and vegetables should be consumed daily as part of a diversified and healthy diet.

SDGs 2 8 12 13 14 15

Food loss and waste

Respect food from farm to table

Fruit and vegetables are worth more than their price. Maintaining their quality and assuring their safety across the supply chain, from production to consumption, reduces losses and waste and increases their availability for consumption.

Innovate, cultivate, reduce food loss and waste

Innovation, improved technologies and infrastructure are critical to increase the

efficiency and productivity within fruit and vegetable supply chains to reduce loss and waste.

SDGs 1 2 12 15

Sustainable value chains

Foster sustainability

Sustainable and inclusive value chains can help increase production, and help to enhance the availability, safety, affordability and equitable access to fruit and vegetables to foster economic, social, and environmental sustainability.

SDGs 1 2 3 4 5 8 11 12 15

Highlighting the role of family farmers

Growing prosperity

Cultivating fruit and vegetables contributes to a better quality of life for family farmers and their communities. It generates income, creates livelihoods, improves food security and nutrition, and enhances resilience through sustainably managed local resources and increased agrobiodiversity.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

Source: Fruit and vegetables – your dietary essentials, FAO background paper, FAO, Rome