



जड़ फसलों के लिए भारतीय समाज (अइ एस आर सी)
INDIAN SOCIETY FOR ROOT CROPS (ISRC)

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भाकृअनुप-केन्द्रीय कद फसल अनुसंधान संस्थान
ICAR-CENTRAL TUBER CROPS RESEARCH INSTITUTE

cordially invite you to



एच.एच. श्री विशाखम तिरुनाल
एंडोवमेंट भाषण : 2025

**H. H. Sree Visakhram Thirunal
Endowment Lecture : 2025**

**Genome Revolution: India's Trailblazing Path
to the First Edited Rice Variety**

23 June 2025

By



Dr. Viswanathan Chinnusamy

Joint Director (Research)

**ICAR-Indian Agricultural Research Institute (IARI)
New Delhi**

About ICAR-CTCRI

The ICAR-Central Tuber Crops Research Institute (CTCRI), Thiruvananthapuram, a premier institute under the Indian Council of Agricultural Research, New Delhi, established in 1963 has been involved in R&D activities of tropical tuber crops. Important ones are cassava, sweet potato, yams, elephant foot yam, taro and tannia. The Institute has developed and popularized 77 improved varieties, agrotechniques and cropping systems for climatic resilient farming and an array of value added food, feed and industrial products to improve livelihoods of about 200 million Indians who directly or indirectly depend on these crops for food and nutritional security as well as livelihoods.

About ISRC

The Indian Society for Root Crops (ISRC), a registered scientific society devoted to R&D of tropical tuber crops was established in 1972 with Headquarters at ICAR-CTCRI, Thiruvananthapuram and has more than 500 members including those from overseas. A biannual publication of the society, *The Journal of Root Crops*, publishes research papers on tropical tuber crops. The society has also organized a host of International and National Symposia and group meetings in collaboration with International agencies like CIP, CIAT, IDRC, FAO, CIRAD etc and National agencies like ICAR, CSIR, DBT, DST, NABARD and SBI etc.

About Endowment Lecture

Cassava or Tapioca finds mention in the history of the erstwhile state of Travancore as the insurance crop which safeguarded the people from the ravages of the famines which swept through other parts of country. The people of the state owed this good fortune to the great visionary Maharaja H. H. Sree Visakham Thirunal Rama Varma V (1880-1885), who encouraged the cultivation of cassava on a large scale among the people, during his reign. His Highness' keen interest in Botany and Agriculture helped to popularise cassava's acceptance as an important food source. A progressive expansion in the area of cultivation of cassava helped to guarantee the food and livelihood security of rural people. Cassava has now widened its spectrum of use from a food security crop to an industrial raw material catering to the needs of starch, sago and wafer industries in Tamil Nadu, Andhra Pradesh, Maharashtra etc. In the present food security scenario, tuber crops especially, cassava, are expected to play a major role in the national perspective.

In acknowledgment of the significant and crucial role of H.H. Sree Visakham Thirunal in popularising the cultivation of cassava in Kerala; in assessing and recognizing its qualities as a food crop; in anticipating its compatibility to the agro-eco system and the food habits of the people; in foreseeing its possibilities of the

symbol of lifestyle of the community and in making cassava integral to the very identity of the people of Kerala, the Indian Society for Root Crops decided to pay homage to H.H. Sree Visakham Thirunal by instituting an endowment in his honour to be known as “H.H. Sree Visakham Thirunal Endowment”. The endowment intends to organize H.H. Sree Visakham Thirunal Endowment lecture annually envisaging the participation of personalities from the field of Agricultural/ Biological Sciences on topics of contemporary significance.

About Dr. Viswanathan Chinnusamy

Dr. Viswanathan Chinnusamy is a renowned plant physiologist and currently serving as Joint Director (Research) at ICAR-IARI, New Delhi. A graduate of TNAU, Killikulam, Tamil Nadu, he holds M.Sc. and Ph.D. degrees from IARI. He has international research experience as a visiting researcher at the University of California (2008-2010) and a visiting scholar at Harvard Medical School in 2009.

Since 1996, he is serving IARI at various capacities including Head of the Division of Plant Physiology (2013-2022). He has made pioneering contributions in plant stress physiology, especially in cold stress signaling, ABA and microRNA pathways, and has led impactful research in phenomics and genome editing. He established the Nanaji Deshmukh Plant Phenomics Centre and the Discovery Centre, introducing AI-aided phenotyping to bridge genotype-phenotype gaps. He led world's first CRISPR-Cas-based genome edited rice variety (Pusa DST Rice 1) and played a key role in drafting national genome editing policies and biostimulant guidelines. As National Coordinator of a ₹ 310 crore ICAR genome editing initiative, he oversees collaboration across 24 institutes.

He has over 25 years of teaching experience. At IARI, he has guided 13 Ph.D. and 3 M.Sc. students. With 300+ peer-reviewed publications, 24,000+ citations, and an h-index of 58, he was listed among the top 2% most influential scientists worldwide by Stanford University in 2023, having a profound impact on plant physiology and agricultural biotechnology.

A Fellow of National Academy of Agricultural Sciences (NAAS) and the Indian Society for Plant Physiology (ISPP), he has received several prestigious awards, including the NAAS Recognition Award, ICAR Jawaharlal Nehru Award, DST BOYSCAST Fellowship.

Dr. Chinnusamy continues to lead cutting-edge research initiatives and his commitment to scientific excellence and mentorship has made him a source of inspiration for researchers, students, and professionals worldwide.



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भाकृअनुप-केन्द्रीय कंद फसल अनुसंधान संस्थान

(भारतीय कृषि अनुसंधान परिषद)

श्रीकार्यम, तिरुवनन्तपुरम 695 017, केरल, भारत

ICAR-CENTRAL TUBER CROPS RESEARCH INSTITUTE

(Indian Council of Agricultural Research)

Sreekariyam, Thiruvananthapuram-695 017, Kerala, India



H. H. Sree Visakham Thirunal Endowment Lecture : 2025

Date & Time: 23 June 2025, 10.00 am - 11.30 am

Venue: Millennium Hall, ICAR-CTCRI, Sreekariyam

..... Programme

Floral Tribute to H.H. Sree Visakham Thirunal

ICAR Theme Song

Welcome Address

Dr. T. Makeshkumar

Secretary

Indian Society for Root Crops

Presidential Address

Dr. G. Byju

President

Indian Society for Root Crops &

Director, ICAR-CTCRI

Address by Guest of Honour

Dr. V. Arunachalam

Director, KSCSTE-JNTBGRI

Thiruvananthapuram

Endowment Lecture

Dr. Viswanathan Chinnusamy

Joint Director (Research)

ICAR-IARI, New Delhi

Vote of Thanks

Dr. H. Kesava Kumar

Joint Secretary

Indian Society for Root Crops

National Anthem

