



Programme

International Conference on
TROPICAL
ROOTS AND TUBERS
FOR
SUSTAINABLE
LIVELIHOOD
UNDER CHANGING
AGRO-CLIMATE
09-12 July 2013

Organised by



Indian Society for Root Crops (ISRC)



Central Tuber Crops Research Institute (CTCRI)

**International Conference on Tropical Roots and Tubers for Sustainable
Livelihood Under Changing Agro-Climate
(ICTRT 2013)**

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ICTRT 2013

Programme

Date	Time	Programme
09.07.2013	15.00-17.00	Registration, Fix Posters of Sessions 1, 2 and 3.
	17.00-18.00	Inauguration
	18.00-18.30	High Tea
	18.30-20.30	Cultural Programme
	20.00-21.00	Banquet Dinner

Session 1 - Biodiversity, genetic resources and crop improvement

Chairperson	Co-chairperson	Rapporteur 1	Rapporteur 2
N.M. Nayar Former Director, CTCRI	Clair Hershey Cassava Programme Leader, CIAT	A. Asha Devi Senior Scientist, CTCRI	Elizabeth Y. Parkes IITA, Nigeria

10.07.2013	8.00-8.30	Conference Kit Distribution			
	Lead Talks				
	8.30-8.50	BGC-L1	Clair Hershey	CIAT, Colombia	Cassava biodiversity, genetic resources and crop improvement
	8.50-9.10	BGC-L2	Vincent Lebot	CIRAD, Vanuatu	Strengthening small holders' capacity to adapt to agro-climatic changes: optimization of root crops germplasm management and use
	9.10-9.30	BGC-L3	Michael Abberton	IITA, Nigeria	New approaches to the conservation and characterisation of genetic resources of cassava and yam
	Oral Presentations				
	9.30-9.40	BGC-O1	Dam Roy S.	CARI, India	Potentials of root and tuber crops for food and nutritional security in Andaman and Nicobar Islands, India
	9.40-9.50	BGC-O2	Hernan Ceballos	CIAT, Colombia	Improving the protocol for root sampling and carotenoids quantification in cassava

9.50-10.00	BGC-O3	Bunmi Olasanmi	University of Ibadan, Nigeria	Cross-compatibility among six improved cassava (<i>Manihot esculenta Crantz</i>) varieties
10.00-10.10	BGC-O4	Sheela M. N.	CTCRI, India	Comparative analysis of the effect of the ploidy manipulation on agronomical and biochemical traits with emphasis on cassava and yams
10.10-10.20	BGC-O5	Thavabalachandran M.	HCRDI, Sri Lanka	The two new improved greater yam varieties: Raja ala and Kakulu ala
10.20-10.30	BGC-O6	Sreekumar J.	CTCRI, India	Data mining for SSRs in ESTs and EST-SSR marker development in tuber crops
10.30-11.00	Tea / Poster Sessions 1, 2, 3			
11.00-11.10	BGC-O7	Misra R.C.	NBPGR, Cuttack, India	Wild genetic resources for livelihood sustenance: a study on tuberous food plants of Similipal Biosphere Reserve, Odisha
11.10-11.20	BGC-O8	Nilima Karmakar	NAU, Gujarat, India	Assessment of genetic variability among Indian cultivars of elephant foot yam (<i>Amorphophallus paeoniifolius</i>) using RAPD, biochemical and morphological analysis
11.20-11.30	BGC-O9	Asha Devi A.	CTCRI, India	Analysis of genetic diversity in edible aroid accessions of India based on morphological characters
11.30-11.40	BGC-O10	Shirly Raichal Anil	CTCRI, India	Karyosystematic studies in <i>Amorphophalls</i> Blume ex Decne
11.40-11.50	BGC-O11	Dwivedi N. K.	NBPGR, Thrissur, India	Collection and conservation of genetic resources of tropical root and tuber crops for sustainable livelihood
11.50-12.00	BGC-O12	Bijaya Devi A. K.	CAU, Manipur, India	Prospects of tuber crops in North-Eastern states with special reference to Manipur
12.00-12.10	BGC-O13	Archana Mukherjee	CTCRI, India	Valued traits in genetic resources of tuber crops: ascent to food and nutrition security under changing climate

Session 2 : Biotechnology and biofortification

Chairperson N. K. Krishna Kumar, DDG (Hort.), ICAR/ S. P. Ghosh, Former DDG (Hort.), ICAR	Co-chairperson P. S. Naik Director, IIVR, Varanasi	Rapporteur 1 C. Mohan Senior Scientist, CTCRI	Rapporteur 2 M. R. Beena Post Doctoral Fellow, DSMZ, Germany
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Lead Talks					
10.07.13	12.10-12.30	BB-L1	Peng Zhang	CAS, China	Cassava biotechnology and functional genomics: from fundamental questions to molecular breeding
	12.30-12.50	BB-L2	Herve Vanderschuren	ETH, Switzerland	The contribution of biotechnology and OMICs to cassava improvement: virus resistance, post-harvest deterioration and biofortification
	13.00-16.00	Lunch and visit - CTCRI			
Oral Presentations					
	16.00-16.10	BB-O1	Nigel Taylor	DDPSC, USA	Virus resistant cassava for Africa Project (VIRCA): application of RNAi technology for delivery of virus resistant cassava in Africa
	16.10-16.20	BB-O2	Mohan C.	CTCRI, India	Identifying defense responsive genes in CMD resistant parent (MNgA-1) using subtracted cDNA library
	16.20-16.30	BB-O3	Leena Tripathi	IITA, Kenya	Genetic transformation of African farmer-preferred cassava cultivars
	16.30-16.40	BB-O4	Dhanya Jayaseelan	CTCRI, India	Development of resistance against <i>Sri Lankan cassava mosaic virus</i> in <i>Nicotiana benthamiana</i> using hairpin RNA constructs
	16.40-16.50	BB-O5	Beena M. Ravindran	DSMZ, Germany	Resistance against cassava brown streak disease (CBSV/UCBSV) using shRNA and amiRNA
	16.50-17.00	BB-O6	Kamala S.	CTCRI, India	Large scale <i>in vitro</i> multiplication of <i>Amorphophallus paeoniifolius</i>

	17.00-17.10	BB-O7	Neelanjana Choudhury	BCKV, West Bengal, India	Molecular cloning and characterization of the regulatory and structural genes of anthocyanin biosynthetic pathway in Indian sweet potato (<i>Ipomoea batatas</i> (L.) Lam.) cultivars
	17.10-17.20	BB-O8	Evans Nyaboga	IITA, Kenya	Overexpression of dehydroascorbate reductase in cassava delays post – harvest physiological deterioration
	17.20-17.30	BB-O9	Grüneberg W.J	CIP, Peru	Contribution of orange flesh sweet potato varieties to the recommended daily allowance of pro-vitamin A, iron and zinc
	17.30-18.00	Tea/Poster Sessions 1, 2, 3			

Session 3 : Quality planting material production

Chairperson Hernan Cebellos CIAT, Colombia	Co-chairperson James George Project Co-ordinator AICRP (Tuber Crops), CTCRI	Rapporteur 1 M. Nedunchezhiyan Principal Scientist, CTCRI	Rapporteur 2 Beatrice A. Aighewi Seed Yam Specialist, IITA, Nigeria
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	Lead Talks				
10.07.13	18.00-18.20	QPM-L1	Singh B. P.	CPRI, Himachal Pradesh, India	Quality planting material production of potato
	18.20-18.40	QPM-L2	Hernan Ceballos	CIAT, Colombia	Strategies for the production of good quality planting material in cassava
	Oral Presentations				
	18.40-18.50	QPM-O1	James George	CTCRI, India	Rapid production of disease free planting material in cassava : a success story from India
	18.50-19.00	QPM-O2	Sila M. M.	Ministry of Agriculture, Kenya	Spearheading the cassava (<i>Manihot esculenta</i>) agenda through bulking and distribution of healthy cassava planting material for small holder farmers- the Kenyan experience

	19.00-19.10	QPM-O3	Mignouna D. B.	IIT A, Nigeria	Economic analysis of yam seed tuber systems in Nigeria
	19.10-19.20	QPM-O4	Rabindran R.	TNAU, Tamil Nadu, India	Production of virus free planting material through meristem tip culture and mass multiplication in cassava
	19.20-19.30	QPM-O5	Morufat Balogun	IITA, Nigeria	Relative effects of uniconazole-p and other growth regulators on multiplication of yam (<i>Dioscorea</i> spp.) plantlets at different growth phases

Session 4 : Plant, water and nutrient management

Chairperson Rod Lefroy Regional Co-ordinator for CIAT, Asia	Co-chairperson N. P. Singh Director, ICAR Research Complex for Goa, Goa	Rapporteur 1 S. Sunitha Principal Scientist, CTCRI	Rapporteur 2 P. S. Kavitha Assistant Professor, TNAU, KVK, Salem
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	Lead Talks				
11.07.13	8.30-8.50	PWN-L1	Venkateswarlu B.	CRIDA, Andhra Pradesh, India	Current status and initiatives for adaptation to climate change of Indian Agriculture
	8.50-9.10	PWN-L2	Stefan Hauser	IITA, Nigeria	Effects of leaf harvest start date and frequency on root yield of three cassava varieties in the Western lowlands of DR Congo
	9.10-9.30	PWN-L3	Srivastava A.K.	NRCC, Maharashtra, India	Site specific nutrient management in perennial crops: constraints and opportunities
	Oral Presentations				
	9.30-9.40	PWN-O1	Ravindran C. S.	CTCRI, India	Enhancing cassava production in India through improved crop production practices
	9.40-9.50	PWN-O2	Jacob John	KAU, Kerala, India	Performance of cassava (<i>Manihot esculenta</i> Crantz), sweet potato (<i>Ipomoea batatas</i> (L.) Lam.) and Chinese potato (<i>Plectranthus rotundifolius</i> (Poir) J. K. Morton) in rice based cropping system of South Kerala

	9.50-10.00	PWN-O3	Suja G.	CTCRI, India	Organic farming improves yield, quality and soil health – a decade experience in tuber crops
	10.00-10.10	PWN-O4	Surendran U.	CWRDM, Kerala, India	Rainfall-runoff-soil and nutrient loss relationships for cassava and cassava pineapple strip cropping in humid tropical Kerala, India
	10.10-10.20	PWN-O5	Susan John K.	CTCRI, India	Nutrient efficient genotypes: a better option for low input management in cassava
	10.20-10.30	PWN-O6	Pushpakumari R.	KAU, Kerala, India	Organic production technology for cassava
	10.30-11.00	Tea / Poster Sessions 4, 5, 6,7			
	11.00-11.10	PWN-O7	Ramesh V.	CTCRI, India	Nutrient use efficiency of zeolites in sweet potato (<i>Ipomoea batatas</i> L.)
	11.10-11.20	PWN-O8	Sunitha S.	CTCRI, India	Productivity of cassava (<i>Manihot esculenta</i>) as affected by drip fertigation in humid tropics
	11.20-11.30	PWN-O9	Kaswala A. R.	NAU, Gujarat, India	Growth, yield, quality of elephant foot yam and soil properties as affected by organic manures and biofertilizers under organic farming
	11.30-11.40	PWN-O10	Laxminarayana K.	CTCRI, India	Effect of lime, mycorrhiza, inorganic and organic manures on soil quality, yield, proximate composition and nutrient uptake of sweet potato in alfisols
	11.40-11.50	PWN-O11	Sabitha Soman	CTCRI, India	Impact of 2030 climate on suitability of cassava in major growing environments of India
	11.50-12.00	PWN-O12	Mhaskar N. V.	KKV, Maharashtra, India	Integrated nutrient management for higher productivity and soil sustainability in cassava under lateritic soil

Session 5 : Biotic and abiotic stresses

Chairperson M. Anandaraj Director, Indian Institute of Spices Research, Kozhikode, Kerala	Co-chairperson S. K. Malhotra Assistant Director General (Hort.), ICAR	Rapporteur 1 S. S. Veena Principal Scientist, CTCRI	Rapporteur 2 Jayanta Tarafdar Professor, BCKV, West Bengal
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Lead Talks					
11.07.13	12.00-12.20	BAS-L1	Stephan Winter	DSMZ, Germany	Viruses in root and tuber crops – from description of new viruses to diagnostic challenges
	12.20-12.40	BAS-L2	Viswanathan C.	IARI, New Delhi, India	ABA signalling at the cross-road of biotic and abiotic stress responses
Oral Presentations					
	12.40-12.50	BAS-O1	Lava Kumar P.	IITA, Nigeria	Virus threats to cassava and yam in sub-saharan Africa: new insights on controlling old nemesis
	12.50-13.00	BAS-O2	Makeshkumar T.	CTCRI, India	Relationship between cassava mosaic disease symptom expression and viral load in recovery phenotypes of cassava
	13.00-14.00	Lunch / Poster Sessions 4, 5, 6, 7			
	14.00-14.10	BAS-O3	Indranil Dasgupta	Delhi University, New Delhi, India	RNA interference as a tool to generate resistance against <i>Sri Lankan cassava mosaic virus</i> in the experimental plant <i>Nicotiana benthamiana</i>
	14.10-14.20	BAS-O4	Veena S. S.	CTCRI, India	Worm power against fungal diseases in aroids: prospects and future strategies
	14.20-14.30	BAS-O5	Marion Liebrecht	DSMZ, Germany	Unraveling the diversity of <i>dasheen mosaic virus</i> in aroids and development of reliable diagnostics to ensure virus freedom of crops
	14.30-14.40	BAS-O6	Jayanta Tarafdar	BCKV, West Bengal, India	Complete genome analysis of monopartite <i>sweet potato leaf curl virus</i> isolate of West Bengal (SPLCV-Bengal), India and its relationship with other members of begomo viruses
	14.40-14.50	BAS-O7	Jayaprakas C. A.	CTCRI, India	Management of insect pests in field crops and stored products using green pesticide developed from cassava

14.50-15.00	BAS-O8	Kris A. G. Wyckhuys	CIAT, Vietnam	Sustainable management of cassava mealybugs in South East Asia: the road ahead
15.00-15.10	BAS-O9	Rajasekhara Rao K.	CTCRI, India	Evidence of plant volatile suppression in sweet potato by insect vectors transmitting <i>sweet potato feathery mottle virus</i>
15.10-15.20	BAS-O10	Resmi T. R.	MKU, India	<i>Agrobacterium tumefaciens</i> virulence protein VirE2 reduces <i>Sri Lankan cassava mosaic virus</i> (SLCMV) infection in transgenic <i>Nicotiana benthamiana</i> plants
15.20-15.30	BAS-O11	Maruthi M. N.	NRI, UK	Cassava brown streak virus disease – understanding a difficult disease for providing effective control
15.30-15.40	BAS-O12	Geetha B.	TNAU, Tamil Nadu, India	Classical biological control of the papaya mealybug, <i>Paracoccus marginatus</i> through the parasitoid, <i>Acerophagus papaya</i> in Salem and Namakkal districts of Tamil Nadu
15.40-15.50	BAS-O13	Jeeva M. L.	CTCRI, India	Characterisation and management of greater yam anthracnose in India
15.50-16.00	BAS-O14	Ravi V.	CTCRI, India	Gene expression in tuber forming root of sweet potato under heat stress
16.00-16.10	BAS-O15	Nedunchezhiyan M.	CTCRI, India	Weed management of root and tuber crops in India
16.10-17.30	Tea / Poster Sessions 4, 5, 6, 7			

Satellite Meeting : Assessing research needs for roots, tubers and bananas

Chairperson M. M. Mustaffa Director, National Research Centre for Banana, Trichi	Co-chairperson Graham Thiele Director, RTB, CIP, Peru	Rapporteur 1 V. Ramesh Senior Scientist, CTCRI	Rapporteur 2 V. Kumar Senior Scientist, National Research Centre for Banana, Trichi
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11.07.13	17.30-17.45	SM-O1	Graham Thiele	Director, RTB, Lima, Peru	CGIAR research program on roots, tubers, and bananas (RTB): rationale, strategy and impact
	17.45-18.00	SM-O2	Shawkat A. Begum	Chief of Party (CoP) USAID Horticulture Project – CIP/AVRDC Bangladesh	Promoting gender transformative strategy with orange-fleshed sweet potato: experience from horticulture project in Bangladesh
	18.00-18.15	SM-O3	Clair Hershey	CIAT, Colombia	Accelerating impact of cassava technologies through an innovative research framework
	18.15-18.30	SM-O4	Surjit Vikraman	CIP, India	Root and tuber crops in Asian food systems: evidence of their contribution to food security in five countries
	18.30-19.00	SM-O5	Bernardo Creamer	CIAT, Colombia	Priorities for a global cassava research program to improve food security and income in developing countries: a Delphi-AHP consultation approach
	19.00-19.20		Graham Thiele/ Bernardo Creamer		Question and answers/ discussion
	19.20-19.30		Bernardo Creamer	CIAT, Colombia	Multicriteria survey
	19.30-20.30	Cultural Programme and Dinner			

Session 6 : Processing and value addition

<p>Chairperson Keith Tomlins University of Greenwich, UK and President, ISTRC</p>	<p>Co-chairperson S. K. Nanda Project Co-ordinator AICRP (PHT), CIPHET, Ludhiana, Punjab</p>	<p>Rapporteur 1 A. N. Jyothi Senior Scientist, CTCRI</p>	<p>Rapporteur 2 O. A. Abiodun Lecturer, Osun State Polytechnic, Nigeria</p>
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Lead Talks					
12.07.13	8.30-8.50	PVA-L1	Keith Tomlins	NRI, UK	Processing and value addition of root and tuber crops in the 21st century
	8.50-9.10	PVA-L2	Padmaja G.	CTCRI, India	Cassava and sweet potato pasta as novel functional foods with low starch digestibility and high nutritional value
Oral Presentations					
	9.10-9.20	PVA-O1	Hernan Ceballos	CIAT, Colombia	Advances in developing and characterizing novel cassava starches
	9.20-9.30	PVA-O2	Abiodun O. A.	OSP, Nigeria	Effect of blanching/soaking method on the chemical and functional properties of trifoliolate yam (<i>Dioscorea dumetorum</i>) flours
	9.30-9.40	PVA-O3	Saravanan Raju R.	CTCRI, India	Biochemical characterization of secondary metabolites accumulated during post-harvest deterioration of cassava (<i>Manihot esculenta</i> Crantz)
	9.40-9.50	PVA-O4	Moorthy S. N.	Santhigiri Foundation, Kerala, India	Structural, gelatinisation and rheological profiles of tropical tuber starches
	10.00-10.30	Tea / Poster Sessions 4, 5, 6, 7			
	10.30-10.40	PVA-O5	Jyothi A. N.	CTCRI, India	Cassava starch based novel biomaterial for agricultural, food and pharmaceutical applications
	10.40-10.50	PVA-O6	Ray R. C.	CTCRI, India	Bioethanol production from sweet potato
	10.50-11.00	PVA-O7	Sudhakara Rao J.	PU, Tamil Nadu, India	Effect of cross – linking on cassava starch and its properties
	11.00-11.10	PVA-O8	Sheriff J. T.	CTCRI, India	Comparative assessment on the production of high quality cassava flour (HQCF) in India and Nigeria

Session 7: Technology transfer and marketing

Chairperson P. V. Balachandran Director of Extension, Kerala Agricultural University	Co-chairperson C. Bhaskaran Professor, Agricultural Extension, Kerala Agricultural University	Rapporteur 1 J. Sreekumar Senior Scientist, CTCRI	Rapporteur 2 Jacob John Associate Professor, Kerala Agricultural University
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Lead Talks					
12.07.13	11.10-11.30	TTM-L1	Bernardo Creamer	CIAT, Colombia	<i>Ex-ante</i> evaluation of the economic impact of pests in cassava production
	11.30-11.50	TTM-L2	Sreekanth Attaluri	CIP, India	Generating advances in incomes and nutrition through sweet potato (GAINS) - an experience of International Potato Center in Odisha, India
Oral Presentations					
	11.50-12.00	TTM-O1	Sankaran M.	CARI, India	Participatory demonstration of tuber crops technologies in Andaman and Nicobar Islands, India
	12.00-12.10	TTM-O2	Ngue Bissa Thomas	PNDRT, Cameroon	PNDRT partnership and strategies to promote cassava production and utilization in Cameroon
	12.10-12.20	TTM-O3	Anantharaman M.	CTCRI, India	Problem diagnosis and research prioritisation of sweet potato in India
	12.20-12.30	TTM-O4	Misra R. S.	CTCRI, India	Food and nutritional security through root and tuber crops in the tribal region of Odisha, Chhattisgarh and Jharkhand states of India
	12.30-12.40	TTM-O5	Kavitha P. S.	TNAU, Tamil Nadu, India	Empowerment of tribal cassava growers through cassava based agripreneurship
	12.40-12.50	TTM-O6	Maroya N.	IITA, Nigeria	Effectiveness of a multi - disciplinary and multi-institutional team work for yam value chain research for development in West Africa
	12.50-13.00	TTM-O7	Santhosh Mithra V. S.	CTCRI, India	Participatory development of a web based user friendly cassava expert system
	13.00-14.00	Lunch / Poster Sessions 4, 5, 6, 7			

Scientist-Industry Interface

Chairperson K.K. Kaushal I.F.S. Managing Director, SAGOSERVE	Co-chairperson P. L. Saroj Director, Directorate of Cashew Research, Puttur	Rapporteur 1 V. S. Santhosh Mithra Senior Scientist, CTCRI	Rapporteur 2 B. V. K. Bhagavan Professor, Dr. YSR Horticultural University, Andhra Pradesh
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12.07.13	14.00-15.00	Lead Talk : Kaushal K. K., Managing Director, SAGOSERVE, Salem, Tamil Nadu, India
		Vimal Kumar, S., Shri Varalakshmi Group of Companies, Salem, Tamil Nadu, India
		Sivakumar R., Selvakumar Sago Factory, Salem, Tamil Nadu, India
		Radhakrishnan, Angel Starch and Sago Products, Erode, Tamil Nadu, India
		Alex, Tierra Foods, Adoor, Kerala, India
		Singh S. P., ITC, Hyderabad

Plenary Session

Chairperson S. K. Chakrabarti Director, CTCRI	Co-chairperson S. Ramanathan President, Indian Society for Root Crops	Rapporteur 1 G. Suja Chief Editor, Journal of Root Crops	Rapporteur 2 M. L. Jeeva Joint Secretary, Indian Society for Root Crops
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	15.00-16.00	Recommendations of different sessions	
	15.00-15.10	Introductory Remarks	S. K. Chakrabarti / S. Ramanathan
	15.10-15.15	Biodiversity, genetic resources and crop improvement	A. Asha Devi
	15.15-15.20	Biotechnology and biofortification	C. Mohan
	15.20-15.25	Quality planting material production	M. Nedunchezhiyan
	15.25-15.30	Plant, water and nutrient management	S.Sunitha
	15.30-15.35	Biotic and abiotic stresses	S. S. Veena
	15.35-15.40	Satellite meeting: assessing research needs for roots, tubers and bananas	V. Ramesh
	15.40-15.45	Processing and value addition	A. N. Jyothi
	15.45-15.50	Technology transfer and marketing	J. Sreekumar
	15.50-15.55	Scientist-Industry Interface	V. S. Santhosh Mithra
	15.55-16.00	Concluding remarks	S. K. Chakrabarti / S. Ramanathan
	16.00	Vote of Thanks	G. Byju, Organising Secretary
		Conference adjourn/Tea	

Poster Presentations

Session 1 - Biodiversity, genetic resources and crop improvement (BGC-P1-42)

BGC-P1	Sankaran M.	CARI, A&N Island, India	Evaluation of cassava and sweet potato varieties in Andaman and Nicobar Islands, India
BGC-P2	Suvashree R. Prusty	OUAT, Odisha, India	Changing agro-climate: tropical tubers and roots as a challenge for sustainable livelihood
BGC-P3	Partha Pratim Sur	BCKV, WB, India	Genetic diversity of Indian sweet potato cultivars evaluated by simple sequence repeat markers
BGC-P4	Krishna Radhika N.	CTCRI, India	<i>In vitro</i> micropropagation of CMD resistant cassava clones
BGC-P5	Vidya P.	CTCRI, India	Phenotypic variations in F1 progenies of CMD resistant mapping population
BGC-P6	Abhilash P. V	CTCRI, India	DUS testing criteria for the protection of cassava varieties in India
BGC-P7	Chandra Deo	NDUAT, Uttar Pradesh, India	Variability, character association and path coefficient analysis in sweet potato
BGC-P8	Vijesh N.	CTCRI, India	Gene network inference from gene expression data: a software performance comparison and evaluation
BGC-P9	Aswathy G. H Nair	CTCRI, India	Effects of gibberellic acid, water and sulphuric acid treatment on germination of sweet potato
BGC-P10	Aswathy G. H Nair	CTCRI, India	Genetic variability studies of sweet potato accessions using Start Codon Targeted (SCoT) polymorphism
BGC-P11	Kenny Thangjam	CAU, Manipur, India	Evaluation of yield and yielding parameters of white-fleshed sweet potato (<i>Ipomoea batatas</i>) under Manipur conditions
BGC-P12	Mhaskar N. V.	KKV, Maharashtra, India	Present status and strategies for popularization of tuber crops under Konkan region of Maharashtra
BGC-P13	Deo Shankar	IGKV, Chhattisgarh, India	Evaluation of indigenous genotypes of Tikhur (<i>Curcuma angustifolia</i> Roxb.) for rhizome and starch yield
BGC-P14	Alam S.	AAU, Assam, India	Aroids and yams of Assam
BGC-P15	Alam S.	AAU, Assam, India	Genetic variation in different cultivars of greater yam (<i>Dioscorea alata</i>)
BGC-P16	Sankaran M.	CARI, A&N Islands, India	Genetic resources of edible aroids and minor tubers of Andaman and Nicobar Islands, India

BGC-P17	Elsamma Joseph Arackal	Maharajas College, Kerala, India	Taxonomy, conservation and sustainable utilisation of the genus <i>Dioscorea</i> in Western Ghats
BGC-P18	Kalidas Pati	CTCRI, India	DUS testing in elephant foot yam and taro
BGC-P19	Prakash P. S.	Govt. Brennen College, Kerala, India	Thermogenesis in taro (<i>Colocasia esculenta</i> L. Schott)
BGC-P20	Geethakrishnan Nair P.	DB College, Kerala, India	Production of inbreds, inbreeding depression and tuber qualities of S1 and S2 progenies in taro (<i>Colocasia esculenta</i> L. Schott)
BGC-P21	Mhaskar N. V.	KKV, Maharashtra, India	Kamala Sundari- a high yielding orange-fleshed sweet potato entry for Konkan region of Maharashtra
BGC-P22	Mhaskar N. V.	KKV, Maharashtra, India	Performance of various genotypes of cassava under South Konkan coastal condition
BGC-P23	Mhaskar N. V.	KKV, Maharashtra, India	Performance of greater yam genotypes for Konkan region under rainfed conditions
BGC-P24	Mhaskar N. V.	KKV, Maharashtra, India	Performance of orange-fleshed sweet potato entries under North Konkan conditions of Maharashtra state
BGC-P25	Velmurugan M.	TNAU, Tamil Nadu, India	Genotype-environment interaction studies on genetic resources of cassava in Yethapur conditions
BGC-P26	Asha K. I	CTCRI, India	<i>In vitro</i> propagation of Chinese potato [<i>Plectranthus rotundifolius</i> (Poir) J. K. Morton]- an important tropical minor tuber crop through axillary shoot bud culture
BGC-P27	Jagatpati Tah	The University of Burdwan, West Bengal, India	Tuberous rhizomes of winged bean (<i>Psophocarpus tetragonolobus</i> L.DC.) : A case study for its edibility
BGC-P28	Allolli T. B	UHS, Karnataka, India	Genetic diversity studies in sweet potato genotypes
BGC-P29	Ashok P.	APHU, Andhra Pradesh, India	Genetic variability and heritability studies in cassava (<i>Manihot esculenta</i> (Crantz))
BGC-P30	Lokesh M. S.	UHS, Karnataka, India	Evaluation of germplasm of <i>Colocasia esculenta</i> (L.) Schott and <i>Xanthosoma sagittifolium</i> (L.) Schott against leaf blight (<i>Phytophthora colocasiae</i> Raciborski.) in Central Western Ghats of Uttara Kannada
BGC-P31	Rupsanatan Mandal	BCKV, West Bengal, India	Assessment of genetic diversity in taro (<i>Colocasia esculenta</i> var. <i>antiquorum</i> (L.) Schott) genotypes using morphological parameters and RAPD profiling

BGC-P32	Desai K. D.	NAU, Gujarat, India	Evaluation of different orange-fleshed sweet potato genotypes (<i>Ipomoea batatas</i> L.) under south Gujarat conditions
BGC-P33	Gayatree Priyadarshinee	CTCRI, India	High starch, low sugar yielding sweet potato genotypes and their micropropagation
BGC-P34	Nusaifa Beevi P.	Iqbal College, Kerala, India	Cytopalynological studies in taro [<i>Colocasia esculenta</i> (L.)] - an overview
BGC-P35	Hernan Ceballos	CIAT, Colombia	Gains from selection to improve carotenoids content in cassava roots
BGC-P36	Archana Mukherjee	CTCRI, India	Valued traits in taro: influence of cytotypes
BGC-P37	Chandra Deo	NDUAT, Uttar Pradesh, India	Studies on character association and path coefficient analysis in arvi (<i>Colocasia esculenta</i> var. <i>antiquorum</i>) germplasm
BGC-P38	Sheela M. N.	CTCRI, India	Genetic diversity for agronomical and morphological traits in yams originated from different regions in India
BGC-P39	Prapit Wongtiem	RFCRC, Thailand	The effect of adenine in cassava primary somatic embryogenesis in released varieties in Thailand
BGC-P40	Prapit Wongtiem	RFCRC, Thailand	Utilization of cassava germplasm core collection in Thailand
BGC-P41	Elizabeth Y. Parkes	IITA, Nigeria	Pro-vitamin A cassava breeding: achievements, current status and future prospects
BGC-P42	Alam Patwary M. M.	BARI, Bangladesh	Evaluation of orange-fleshed sweet potato genotypes for higher yield and quality

Session 2 : Biotechnology and biofortification (BB-P1-9)

BB-P1	Abhinand C. S.	CTCRI, India	An algorithm for plant microRNA target identification
BB-P2	Dwivedi N. K.	NBPGR, Kerala, India	<i>In vitro</i> multiplication of <i>Ceropegia bulbosa</i> Roxb – an endangered herbal famine food tuber species of arid and semi arid region
BB-P3	Peng Zhang	CAS, China	Functional study of CBF transcription factors from cassava (<i>Manihot esculenta</i> Crantz)
BB-P4	Peng Zhang	CAS, China	Deciphering the physico-chemical properties and macromolecular structures of genetically – engineered waxy and high – amylose starches from sweet potato for industrial application
BB-P5	Peng Zhang	CAS, China	Characterization of two key genes, ANS and 3GGT, responsible for catalyzing colorless leucoanthocyanidin to purple anthocyanidin3-

			sophorosides in anthocyanin biosynthesis of sweet potato (<i>Ipomoea batatas</i> Lam.)
BB-P6	Peng Zhang	CAS, China	Enhanced reactive oxygen species scavenging by overproduction of superoxide dismutase and catalase delays post-harvest physiological deterioration of cassava storage roots
BB-P7	Peng Zhang	CAS, China	Down - regulation of glucan water dikinase expression represses starch metabolism in cassava (<i>Manihot esculenta</i> Crantz)
BB-P8	Peng Zhang	CAS, China	Production of high amylopectin or amylose starches in transgenic sweet potato and their impacts on yield
BB-P9	Durgamadhab Rath	CTCRI, India	Antioxidants rich sweet potato (<i>Ipomoea batatas</i> L.) and their antimicrobial activity

Session 3 : Quality planting material production (QPM-P1-7)

QPM-P1	Beatrice A. Aighewi	IITA, Nigeria	Weight and size of seed yam tubers: vague or evident relationship?
QPM-P2	Prakash P. S.	Kannur University, Kerala, India	<i>In vitro</i> propagation of elephant foot yam [<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson (Araceae)] using seed as explant
QPM-P3	Bhagavan B. V. K	APHU, Andhra Pradesh, India	Biochemical changes of elephant foot yam cv. Gajendra under different storage conditions during wet and dry seasons
QPM-P4	Sheeba Rebecca Isaac	KAU, Kerala, India	Influence of potting media and mulching on the sprouting and growth of <i>Dioscorea alata</i> minisetts
QPM-P5	Shiji R.	CTCRI, India	Efficiency of tissue culture techniques for rapid multiplication of planting material production in cassava (<i>Manihot esculenta</i> Crantz)
QPM-P6	Sushanta Kumar Jata	CTCRI, India	Evaluation of different nursery techniques in cassava (<i>Manihot esculenta</i>)
QPM-P7	Lava Kumar P.	IITA, Nigeria	Production of virus-free yam: breaking the deadlock

Session 4 : Plant, water and nutrient management (PWN-P1-43)

PWN-P1	Kalavathi S.	CPCRI, Kerala, India	Community based adoption of intercropping in coconut based farming systems of Kerala with special reference to tuber crops
PWN-P2	Velmurugan M.	TNAU, Tamil Nadu, India	Effect of pruning and fertilizer application on tuber yield and starch content in different varieties of cassava under Yethapur conditions
PWN-P3	Surajit Mitra	BCKV, West Bengal, India	Nutritional facts and techniques for production and storage of elephant foot yam (<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson)
PWN-P4	Saravaiya S. N.	NAU, Gujarat, India	Response of greater yam (<i>Dioscorea alata</i> L) to various modes of staking
PWN-P5	Kavitha P. S.	TNAU, Tamil Nadu, India	Evaluation of foliar application of nutrients and soil test based fertilizer recommendation in cassava
PWN-P6	Patel N. B.	NAU, Gujarat, India	Effect of plant density and corm size on growth and yield of elephant foot yam (<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson) cv. Gajendra
PWN-P7	Desai K. D.	NAU, Gujarat, India	Performance of greater yam (<i>Dioscorea alata</i> L.) under different staking systems
PWN-P8	Naga Lakshmi R.	APHU, Andhra Pradesh, India	Intercropping of elephant foot yam with turmeric and ginger under Godavari alluvial soils
PWN-P9	Rajees P. C.	MSSRF, Kerala, India	A comparative study on the yield potential of three elephant foot yam varieties in Wayanad
PWN-P10	Nishan M. A.	KAU, Kerala, India	Yield and economic analysis of organic nutrient management of tuber crops
PWN-P11	Vandana Venugopal	KAU, Kerala, India	Performance of banana var. Nendran and intercropped chittaratha under normal and double sucker system of planting
PWN-P12	Gladis R.	KAU, Kerala, India	Performance of cassava and elephant foot yam as intercrops in coconut based cropping system
PWN-P13	Geetha K.	KAU, Kerala, India	Effect of silt application in tuber crops production in reclaimed alluvial soils of Kuttanad
PWN-P14	Ashok P.	APHU, Andhra Pradesh, India	Integrated nutrient management studies in cassava under rainfed conditions of Andhra Pradesh

PWN-P15	Chithra S.	CTCRI, India	Thippi compost: a possible avenue for cassava starch factory solid waste management
PWN-P16	Shanida Beegam S. U.	CTCRI, India	Nutrient efficient genotypes and nutrient management practices in the carbon sequestration potential of cassava: a theoretical approach
PWN-P17	Uma Madhavan	KU, Kerala, India	Nutrient uptake and harvest index in yam bean (<i>Pachyrrhizus erosus</i> L.) due to arbuscular mycorrhizal rhizobial inoculation
PWN-P18	Kaswala A. R.	NAU, Gujarat, India	Effect of different organic manures on yield, quality, nutrient uptake and soil fertility under organic farming in greater yam
PWN-P19	Anju V. S.	KAU, Kerala, India	Arrowroot- a remunerative intercrop in the homesteads
PWN-P20	Atul Jayapal	KAU, Kerala, India	Effect of levels of organic manures and biofertilizers on nutrient uptake and soil nutrient status in Chinese potato
PWN-P21	Atul Jayapal	KAU, Kerala, India	Effect of organic nutrition on quality characters of Chinese potato (<i>Plectranthus rotundifolius</i>)
PWN-P22	Seena Radhakrishnan A.R.	CTCRI, India	Growth dynamics, biomass, nutrient uptake and soil properties under organic management in cassava
PWN-P23	Swadija O. K.	KAU, Kerala, India	Influence of organic manures and biofertilizers on rhizome quality of arrowroot intercropped in coconut
PWN-P24	Jagatpati Tah	The University of Burdwan, West Bengal, India	Adaptability of <i>Manihot esculenta</i> (Crantz) in rice growing field in the state of West Bengal
PWN-P25	Hira Singh	PAU, Punjab, India	Performance of short duration cassava varieties in trans-gangetic plain region of Punjab in India
PWN-P26	Saud B. K.	AAU, Assam, India	Standardization of INM practices for upland taro in Assam
PWN-P27	Anish T. Anil	CTCRI, India	Organic management impacts on micro-environment and yield in cassava
PWN-P28	Deo Shankar	IGKV, Chhattisgarh, India	Performance of greater yam (<i>Dioscorea alata</i>) entries under Bastar plateau agro-climatic conditions of Chhattisgarh
PWN-P29	Bijaya Devi A. K.	CAU, Manipur, India	Identification of suitable intercrops with taro (<i>Colocasia esculenta</i>) under Manipur agroclimatic conditions
PWN-P30	Damodaran V.	CARI, A&N Islands, India	Standardization of spacing and size of corm in elephant foot yam for organic production under coconut plantations in Bay Island

PWN-P31	Gayathri P.	KAU, Kerala, India	Intercropping in cassava for food-fodder production
PWN-P32	Remya Remesh K. R.	CTCRI, India	Impact of 2030 climate on suitability of yams in major growing environments of India
PWN-P33	Vani M.	CTCRI, India	Impact of 2030 climate on suitability of <i>Amorphophallus</i> in major growing environments of India
PWN-P34	Sabitha Soman	CTCRI, India	Assessment and mapping of spatial variation of selected soil physical and chemical characteristics of CTCRI farm
PWN-P35	Krishnakumar V.	CPCRI, Kerala, India	Integrated nutrient management for intercropped elephant foot yam (var. Gajendra) in coconut garden
PWN-P36	Santhosh Mithra V. S.	CTCRI, India	Potential yield of cassava in India
PWN-P37	Hridya A. C.	CTCRI, India	Validation of site specific nutrient management for cassava (<i>Manihot esculenta</i> Crantz) at village level
PWN-P38	Hridya A. C.	CTCRI, India	Balanced fertilizer application on tuberous root yield of four cassava (<i>Manihot esculenta</i> Crantz) cultivars
PWN-P39	Abdul Haris A.	ICARRCER, Bihar, India	Climate change impact on potato yield in different agro-climatic zones of Bihar
PWN-P40	Sahoo M. R.	ICARRCNEHR, Manipur, India	Influence of fertilizer and spacing on physiological and biochemical properties of sweet potato (<i>Ipomoea batatas</i> L.) under foot hill conditions of Manipur
PWN-P41	Rajakumar D.	TNAU, Tamil Nadu, India	Economics of elephant foot yam cultivation as a component in coconut based cropping system
PWN-P42	Venkatesan K.	TNAU, Tamil Nadu, India	Effect of INM on yield and quality of elephant foot yam under Tamil Nadu condition
PWN-P43	Venkatesan K.	TNAU, Tamil Nadu, India	Effect of organic sources of nutrients on growth and yield of elephant foot yam

Session 5 : Biotic and abiotic stresses (BAS-P1-28)

BAS-P1	Chandra Deo	NDUAT, Uttar Pradesh, India	Eco-friendly management of leaf blight of taro (<i>Colocasia esculenta</i> var. <i>antiquorum</i>)
BAS-P2	Geetha B.	TNAU, Tamil Nadu, India	Population dynamics and management of red spider mite in cassava
BAS-P3	Anju K. M.	CTCRI, India	Insecticidal activity of a bacterium associated with a novel entomopathogenic nematode, <i>Rhabditis</i> (<i>Oscheius</i>)
BAS-P4	Jithu U. Krishnan	CTCRI, India	Management of banana pseudo stem weevil (<i>Odoiporous longicolis</i> Oliver) using cassava biopesticide
BAS-P5	Akhilesh Kumar Kushawaha	Delhi University, New Delhi, India	Cloning, sequencing and infectivity analysis of a begomovirus associated with the cassava mosaic disease in Southern India
BAS-P6	Peng Zhang	CAS, China	Salt stress response and genetically engineered tolerance in sweet potato (<i>Ipomoea batatas</i>)
BAS-P7	Peng Zhang	CAS, China	Simultaneous over-production of Cu/Zn superoxide dismutase and ascorbate peroxidase in cassava confers increased tolerance to multiple abiotic stresses
BAS-P8	Lokesh M. S.	UHS, Karnataka, India	Efficacy of fungi toxicants in management of leaf blight (<i>Phytophthora colocasiae</i> Raciborski) of taro (<i>Colocasia esculenta</i> (L.) Schott.) in Uttar district of Karnataka in India
BAS-P9	Ashok P.	APHU, Andhra Pradesh, India	Studies on weed management in cassava under rainfed conditions of Andhra Pradesh
BAS-P10	Raghu D.	TNAU, Tamil Nadu, India	Proteome characterization in cassava (<i>Manihot esculenta</i> Crantz) during cassava mosaic disease infection
BAS-P11	Rabindran R.	TNAU, Tamil Nadu, India	Impact of <i>Sri Lankan cassava mosaic virus</i> infection on the tuber yield, starch and protein content of cassava tubers of three popular varieties of Tamil Nadu
BAS-P12	Pravi Vidyadharan	CTCRI, India	Molecular diagnosis of <i>Sclerotium rolfsii</i> - a PCR and hybridization based approach
BAS-P13	Lakshmi B.K.M.	YSRHU, Andhra Pradesh, India	Climate effect on taro yield and leaf blight disease in Southern India
BAS-P14	Norikuni Kumano	OPPPC, Japan	Eradication program of the sweet potato weevil in Kume island, Okinawa, Japan

BAS-P15	Allolli T. B.	UHS, Karnataka, India	Seasonal incidence, nature of damage and biology of sweet potato weevil, <i>Cylas formicarius</i> Fabricius (Coleoptera:Curculionidae) in sweet potato
BAS-P16	Allolli T. B.	UHS, Karnataka, India	Integrated pest management of sweet potato weevil, <i>Cylas formicarius</i> Fabricius in Karnataka
BAS-P17	Thavabalachandran M.	HCRDI, Sri Lanka	Effect of cultural/biological control measures on growth and yield of tannia (<i>Xanthosoma sagittifolium</i> L.)
BAS-P18	Ajitha B.S.	CTCRI, India	Study on the genotoxic effect of cassava based biopesticides and malathion on fresh water teleost fish, Nile Tilapia (<i>Oreochromis niloticus</i>)
BAS-P19	Geetha B.	TNAU, Tamil Nadu, India	Eco-friendly management approaches for the spiralling whitefly, <i>Aleurodicus dispersus</i> (Russell) in cassava
BAS-P20	Mithun Raj	CTCRI, India	Molecular diagnosis and variability of <i>Colletotrichum gloeosporioides</i> causing anthracnose/dieback disease in greater yam (<i>Dioscorea alata</i> L.) from India
BAS-P21	Remya Reghunath S.	CTCRI, India	<i>In vitro</i> nematicidal activity of novel bacteria associated with entomopathogenic nematode, <i>Steinernema</i> sp.
BAS-P22	Vishnu S. Nath	CTCRI, India	Analysis of genetic diversity in <i>Phytophthora colocasiae</i> associated with leaf blight of taro
BAS-P23	Senthil @ Sankar M.	CTCRI, India	Cassava tuber rot caused by <i>Phytophthora palmivora</i> in India
BAS-P24	Kamala S.	CTCRI, India	Diagnosis and characterization of <i>dasheen mosaic virus</i> in <i>Amorphophallus paeoniifolius</i> using molecular techniques
BAS-P25	Ravi V.	CTCRI, India	Critical period of water requirement for elephant foot yam (<i>Amorphophallus paeoniifolius</i>)
BAS-P26	Raji S. N.	CESS, India	Sunlight induced fluorescence imaging as an effective technique for monitoring biotic and abiotic stress in cassava
BAS-P27	Swagatika Misra	CTCRI, India	Temperature dependent predatory activity of coccinellid, <i>Cryptolaemus montrouzieri</i> Mulsant- a successful biocontrol agent of elephant foot yam mealybug
BAS-P28	Jayakumar M.	Rasi Seeds, India	Transgenic approach to develop cassava mosaic virus disease resistance in cassava using RNAi technology

Session 6 : Processing and value addition (PVA-P1-16)

PVA-P1	Sajeev M. S.	CTCRI, India	Physico - mechanical and hygroscopic properties of modified cassava starch based biodegradable films
PVA-P2	Harnan Ceballos	CIAT, Colombia	Changes in extended shelf life of cassava roots during storage in ambient conditions
PVA-P3	Asha V.	CTCRI, India	Low calorie sago from cassava
PVA-P4	Athira G. K.	CTCRI, India	Octenyl succinate starch as a controlled release carrier for the drug theophylline
PVA-P5	Soumya Nair	CTCRI, India	Cassava starch/montmorillonite nanocomposite films: preparation and characterization
PVA-P6	Pooja N. S.	CTCRI, India	A comparative study on the effect of pretreatment techniques in enhancing the biodegradability of agricultural and processing residues of cassava
PVA-P7	Anuj Kumar	NDRI, Haryana, India	Alkali pre-soaking of elephant foot yam: effect of time and temperature
PVA-P8	Vengaiah P. C.	APHU, Andhra Pradesh, India	Physio-chemical and functional characteristics of flour produced from yam tuber (<i>Dioscorea alata</i> L)
PVA-P9	Arijita Bhattacharyya	BCKV, West Bengal, India	Yam bean (<i>Pachyrrhizus</i> sp)–a potential source of natural rotenone
PVA-P10	Surendra Babu A.	PU, Tamil Nadu, India	Effect of autoclaving on functional, chemical, pasting and structural properties of sweet potato starch
PVA-P11	Ann Mary Chacko	CU, Kerala, India	Processing and value addition in roots and tubers – a solution to food security problem
PVA-P12	Abiodun O. A.	OSP, Nigeria	Effect of delayed harvesting on the cooking qualities and sensory properties of trifoliolate yam (<i>Dioscorea dumetorum</i>) tubers
PVA-P13	Shaji James P.	KAU, Kerala, India	Development of a hybrid anaerobic bioreactor for treatment and energy conversion of organic effluents
PVA-P14	Nimmi Jacob	St. Teresa's College, Kerala, India	Development of value added products from selected under exploited tubers
PVA-P15	Rajeswari L. S.	CTCRI, India	Composition of foliar anthocyanins in sweet potato (<i>Ipomoea batatas</i> L.)
PVA-P16	Renjusha Menon	CTCRI, India	Nutritional, cooking and starch digestibility characteristics of native and pretreated legume flour fortified sweet potato spaghetti

Session 7 : Technology transfer and marketing (TTM-P1-8)

TTM-P1	Bernardo Creamer	CIAT, Colombia	<i>Ex-ante</i> impact evaluation of climate change in cassava production in Thailand
TTM-P2	Bernardo Creamer	CIAT, Colombia	Economic impact assessment for cassava in South-East Asia
TTM-P3	Antaryami Lenka	CTCRI , India	Tuber crops interventions to improve livelihood security in disadvantaged districts of Odisha
TTM-P4	Jacob John	KAU, Kerala, India	Yield gap and technology adoption in cassava in homesteads under different agro-ecological units of Kerala
TTM-P5	Ramanathan S.	CTCRI, India	Current status of cassava in Maharashtra
TTM-P6	Sethuraman Sivakumar P.	CTCRI, India	Developing a scale to measure the motives underlying the food choice among cassava consumers of South India
TTM-P7	Venkatesh A.	ICARRC NEH, Meghalaya, India	Tuber crops in <i>jhum</i> lands of North-Eastern regions of India
TTM-P8	Thamban C.	CPCRI, Kasargod	Farmer participatory approach for enhancing food and nutritional security through intercropping of tuber crops in coconut gardens

