



# TNAU NEWS

TAMIL NADU AGRICULTURAL UNIVERSITY NEWS LETTER

Patron: **Dr. K. Ramasamy**, Vice Chancellor  
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Planning & Monitoring

ஊருக்கெல்லாம் உணவளிக்கும் உத்தம உழவர்களுக்கு  
உதவிக்கரம் நீட்டும் பல்கலைக்கழகம்

## 2<sup>nd</sup> ANNUAL SEED WORKSHOP 2013



The second Annual Seed Workshop was organized by Seed Centre, Tamil Nadu Agricultural University on July 22, 2013 to review the achievements made in the seed production programme of TNAU and to provide a platform to the stakeholders, scientists and policy makers to discuss the existing programme and the production plan for the next year. Around 140 participants comprising of scientists of TNAU, officials from Department of Agriculture & Co-operation, GOI, New Delhi, Department of Agriculture, Department of Seed Certification, National Seeds Corporation, representatives of Tamil Nadu Seed

Association and stakeholders of seed industry participated. Dr. K. Ramasamy, Vice Chancellor, TNAU delivered the Presidential Address and released the 2<sup>nd</sup> Annual Seed Workshop Manual. He emphasized the importance of seed quality enhancement in addition to production and distribution of seeds and also suggested to reorient seed technology research focusing towards improving the seed vigour through seed priming techniques. Dr. M. Ramasamy, Managing Director, M/s. Rasi Seeds Pvt. Ltd., Attur, Salem in his Key Note Address highlighted the problems of private seed sector and prioritizing seed research as per the demand of industry. Shri. M. Gunasekaran, Assistant Commissioner (QC), GOI, DAC, New Delhi, Th. K.S. Subramaniam, Joint Director of Agriculture (Seed Inspection), Coimbatore, Dr. C.R. Anandakumar, Director i/c (CPBG) and Dr. M. Maheswaran, Director of Research i/c, TNAU felicitated. Dr. M. Bhaskaran, Special Officer i/c (Seeds) welcomed the gathering with a special mention about the seed supply chain systems of TNAU along with the achievements made so far. Dr. A. Vijayakumar, Professor & Head, Department of Seed Science & Technology, TNAU, Coimbatore, proposed a vote of thanks.

## Solar Energy Applications in Agriculture

One day awareness cum training program on "Solar Energy Applications in Agriculture" was organized by the Department of Bioenergy, Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University, Coimbatore on 21<sup>st</sup> June, 2013 for the benefit of farmers and members of Coimbatore District Horticulture Crop Producers Society. Dr. K. Ramasamy, Vice Chancellor of TNAU presided over the Inaugural Session and inaugurated the programme. In his Presidential Address he emphasized that in the past solar energy was used for drying and densifying the food items in homes but now the use of electricity has become more prominent. He stressed that there is a provision for each district under Rural Development Fund for installing solar street lights and other solar energy gadgets to the farmers. He also



mentioned that the students of Energy and Environmental Engineering in TNAU are engaged in assisting installation of solar energy gadgets like solar PV systems, solar cookers and solar water heaters. Thereby, the utilization of solar energy technology can reach the farmers level easily. Dr. S. Santhana Bosu, Dean, Agricultural Engineering College and Research Institute, Dr. S. Kamaraj, Professor

and Head, Department of Bioenergy and Dr. R. Mahendiran, Assistant Professor, Department of Bioenergy also spoke on the occasion. In the post lunch session a lecture on solar thermal energy systems and their applications was delivered by Dr. R. Mahendiran, Assistant Professor, Department of Bioenergy. Farmers visited the Renewable Energy Park maintained in TNAU for better exposure and energy applications at field level.

### ECOFEST'13 – Green Brain for Green Age

Students of Energy and Environmental Engineering, Agricultural Engineering College and Research Institute, Tamil Nadu Agricultural University, Coimbatore organized the 7<sup>th</sup> National Level Symposium - Ecofest' 13 - Green Brains for Green Age with the theme “Emerging Renewable Energy Technologies and Environmental Issues” on 26 - 27 July, 2013 as part of 'Nature Conservation Day' celebration. The symposium included paper, poster, model and documentary presentations and Époques for the benefit of college students and research scholars. A “Green Brain Painting” contest was held on 21<sup>st</sup> July



2013 in Agricultural Engineering College and Research Institute for school students who came from all over Coimbatore pasteurizing their ideas and views on global warming, future agriculture, renewable energy technology and so on. An exclusive workshop on “Solar Energy” was held on 27<sup>th</sup> July 2013 with parallel sessions of exhibition and other relevant activities. Dr. K. Ramasamy, Vice Chancellor, Tamil Nadu Agricultural University, Worshipful Mayor Thiru. S.M. Velusamy, of Coimbatore Corporation, Thiru. M. Karunakaran, I.A.S., District Collector of Coimbatore and Tmt. G. Latha, IAS, Commissioner of Coimbatore Corporation participated and falcitated.

### Strengthen through Cassava Tonic

Training on cassava tonic foliar spray sponsored by NABARD was conducted at Kurichi and Ramachipalayam villages of Erode district on 09.07.2013. Dr. K. Nageswari, Professor and Head, HRS, Yercaud highlighted the importance of cassava



tonic in tapioca cultivation. Dr. M. K. Kalarani, Professor (Crop Physiology) detailed the nutrient management in tapioca and Dr. V. Jayalakshmi, Professor (Plant Pathology) broughtout the plant protection measures and also emphasized the role of cassava tonic in reduction of Cassava mosaic disease in tapioca. About forty farmers participated in the training programme and all of them were issued a booklet on the technologies of tapioca cultivation. Dr. V. Palanisamy, Professor and Head, Tapioca and Castor Research Station, welcomed the participants.

### Best Stall Award for TCRS, Yethapur in Agri Fair-2013 held at Salem



Tapioca and Castor Research Station, Yethapur received the “**Best live specimen award**” for **Tapioca Yethapur 1 tubers** in Agri and Dairy Fair 2013 organised by the Salem District Agricultural Graduates Consultancy and Service Society at Salem from 05.07.2013 through 08.07.2013. The newly released tapioca variety: Tapioca Yethapur 1 tubers live specimen, YRCH 1 castor seeds and castor gold were exhibited in the programme.

### Training on Arecanut cultivation technologies

One day training on arecanut cultivation was organised by Central Plantation Crops Research Institute, Vittal, Karnataka jointly with Department of Horticulture and Plantation crops and Tapioca and Castor Research Station, Yethapur on 23.07.2013. Dr. D. Jaganathan, Scientist (Extension), CPCRI welcomed the gathering and explained the techniques



in arecanut production. Dr. M. Alagar, Scientist (Entomology) detailed the pest and disease management in arecanut. Dr. D. Raja, Professor (Agronomy) added the importance and usage of biofertilizer in arecanut cultivation. Dr. L. Pugalandhi, Professor (Horticulture) explained the planting and spacing in arecanut cultivation to the participants.

### Upscaling Popularization of Little Millet



One day training program was organized on **“Upscaling popularization of little millet in Jawadhu hills of Thiruvannamalai district, Tamil Nadu for enhancing the livelihood of tribal farmers”** on 09.07.2013 at Puliur village of Changam taluk in Thiruvannamalai district.

The Principal Investigator and Professor, Dr. A. Nirmalakumari, welcomed the gathering and gave detailed information on high yielding variety CO (Samai) 4, a quick growing, short duration millet and highly tolerant to heat and drought stresses yielding both grain and fodder. The yield (1800 kg average recorded in 2 years) was 50% higher compared to local varieties and land races. Ms. Khorsed Talati, Development Officer, SRTT, delivered the Presidential Address and highlighted the importance of the training programme through which they could improve their status of living. She also stated that there is great scope for marketing of samai by way of value addition. Dr. A. Subramanian, Assistant Professor, delivered a lecture on the improved package of practices of samai cultivation which includes seed treatment, importance of line sowing and preventive measures to be followed to minimize the loss of the produce due to lodging and also highlighted the importance of the seed drill. Mr. T. Balasubramanian, Senior Research Fellow of the scheme proposed a vote of thanks. An exhibition depicting the details of high yielding varieties of small millets, advanced package of practices, plant protection measures and value addition was arranged. Inputs, cultivation manual and training kit were distributed to the participants.

### IDRC sponsored Genomic Workshop



The Canadian International Development Agency (CIDA) and International Development Research Center (IDRC), Canada are jointly providing financial support for a project on “Enhanced preservation of Fruits in South Asia” under the Canadian International Food Security Research Fund (CIFSFR). As part of the Project, the Department of Nano Science & Technology organized a CIRSFR sponsored *“Genomic and qRT – PCR Workshop on Mango”* during July 8-12, 2013. The Workshop was designed to provide hands-on experience to the young faculty and research scholars who are involved in the research program. The Workshop carried the basics and applications of Quantitative Real Time-Polymerase Chain Reaction (Qrt-PCR) in Mango Genomics. Fourteen participants from the disciplines of Nanotechnology, Pathology, Biotechnology and Horticulture participated in the Workshop. Dr. K. Ramasamy, Vice Chancellor, TNAU, Coimbatore, inaugurated the workshop. He emphasized the significance of CIDA - IDRC funding in the research and development activities of TNAU and the CIFSFR is complementing the efforts of the university in fruit preservation using nanotechnological approaches. Dr. K. Gunasekaran, Professor & Head, Department of Nano Science & Technology, welcomed the gathering in both Inaugural and Valedictory functions. Dr. K.S. Subramanian, Principal Investigator of the IDRC Project in TNAU proposed vote of thanks.

### March towards Favorite Enrich

An exposure visit on “Pulses cultivation” was organized at Cotton Research Station, Srivilliputtur for 50 farmers of Devadhanam and Sundararajapuram villages on 30.07.2013 under the GOI- DST sponsored scheme entitled “Up scaling pulses productivity through micro mission mode farmers participatory approach in thickly SC/ST populated villages in Virudhunagar district of Tamil Nadu”.

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Dr. P. Amala Balu, Professor and Head of CRS explained the importance of pulses and insisted the farmers to cultivate pulses. The principal Investigator, Dr. R. Veeraputhiran, Assistant Professor (Agronomy) elaborated the agronomic practices like plant population maintenance by line sowing, water, fertilizer and weed management in the demonstration field laid out at the station. Foliar spraying of pulse wonder was also demonstrated to the farmers in the green gram demonstration field.

Dr. M. Gnanasekaran, Assistant Professor (PB&G) highlighted the pulses seed production technologies in the green gram seed production field. Dr. M. Shanthy, Professor (Agrl. Entomology) narrated the integrated management of major insect pests in the pulses field. Mr. S. Venkateswaran, JRF, made logistic arrangements.

### Summer School on ICT held



The ICAR Summer School on "Information & Communication Technology (ICT) Initiatives for Inclusive Agricultural Development" was conducted for 21 days on July 3 - 23, 2013 in the Department of Agricultural Extension and Rural Sociology (AERS), CARDS, TNAU, Coimbatore. Twenty five Extension Scientists representing Agriculture, Veterinary, Fishery and Home Science from 11 different states participated in the Summer School. The participants were exposed to different subject matter areas on ICT such as; Web Portals, Mobile Applications, Expert Systems, Decision Support Systems, Remote Sensing, Sensors and

Robotics, Reusable Learning Objects, Open Education Resources, ICT initiatives of Government, Private and NGO sectors and related areas. Dr. K. Ramasamy, Vice Chancellor, TNAU, inaugurated the Summer School. In his Inaugural Address, the Vice Chancellor stressed that appropriate extension models using ICT tools and traditional folk media need to be handled in tandem to disseminate agricultural information for promoting scientific farming among farmers. Dr. Ravi Kumar Theodore, Professor and Head, Department of AE & RS was the Course Director of the Summer School. Dr. M. Senthil Vinagayam, Director (Agrl. Extn.), MANAGE, Hyderabad highlighted the role of MANAGE in development of e - Extension modules. Dr. G. Radhamani, Professor and Director, School of IT, Dr. GRD College of Science, Coimbatore, delivered the Valedictory Address.

### The legs for Easier Move



Awareness campaign on hybrid castor cultivation was conducted at Rasipuram on 08.07.2013 in Namakkal district under DSIR sponsored scheme. Dr. V. Palanisamy, Professor and Head, Tapioca and Castor Research Station welcomed the gathering and emphasized the importance of hybrid castor. Dr. S. R. Venkatachalam, Professor (PB&G) expounded the technology of hybrid castor cultivation. Dr. G. Senthil Kumar explained the weed control methods, irrigation and pest and disease management in castor. Dr. P. Kalaiselvi, Assistant Professor (Environmental Science) detailed the castor gold application and its benefits. Around 30 Self Help Group women participated and received YRCH 1 castor seed and castor gold.

### Jasmine concrete extraction – Pilot Model Demonstration

An entrepreneurial demonstration on 'Concrete Extraction from Jasmine Flowers' was organized by the Department of Floriculture and Landscaping at jasmine concrete extraction model unit, Botanic Gardens, TNAU, Coimbatore on 13<sup>th</sup> August, 2013. The jasmine concrete extraction model unit was established under the project "Value chain on Flowers for Domestic and Export Markets" funded by ICAR –





National Agricultural Innovation Project. This pilot plant was established as a demonstration facility to disseminate the technology of concrete extraction from jasmine and other flowers to entrepreneurs. Dr. M. Jawaharlal, Professor and Head, Department of Floriculture and Landscaping & Consortium Principal Investigator of the NAIP (Flowers) project welcomed the gathering and gave an overall picture about value addition from jasmine flowers and explained the activities of NAIP project operating on production to consumption basis.

Dr. R. Rabindran, Registrar(i/c), TNAU, emphasised the export opportunities of jasmine concrete in India and distributed certificates to the participants. The Consultant Engineer from M/s. Agro Tech Industries, Karamadai, demonstrated the procedure for extraction of concrete from jasmine to the participants. Er. N. Ganesan, former Engineer, ENCEE Aromatics, Mettupalayam, detailed the history and emergence of concrete extraction units in India. Fifteen entrepreneurs from Coimbatore, Trichy, Chennai, Hosur, Salem and other parts of Tamil Nadu participated in the demonstration programme. Dr. M. Kannan, Prof (Hort) proposed a vote of thanks.

### Scientific Advisory Committee Meeting at Krishi Vigyan Kendra, Tiruvallur



The Seventh Scientific Advisory Committee Meeting of KVK, Tiruvallur was convened on 05.08.2013. Dr. K. Ramasamy, Vice Chancellor of Tamil Nadu Agricultural University, Coimbatore presided over the meeting and offered valuable suggestions for the better functioning of KVKs in tune August 2013

with the betterment of farmers. Dr. R. Agila, Programme Coordinator of the KVK submitted the detailed action taken report on the activities of the KVK. Dr. K.A. Ponnusamy, Director(i/c) of Extension Education, TNAU, Dr. R. Rajendran, Director (i/c), TRRI, and Dr. C.V. Sairam from the Zonal Project Directorate, (Zone VIII), ICAR, Bangaluru felicitated. The thrust areas of operation in Tiruvallur district in the upcoming year was discussed. All the line department officials of Tiruvallur district participated in the meeting and shared their views and ideas.

### Workshop on Representative Agricultural Pathways (RAPS)



A workshop on Representative Agricultural Pathways(RAPS)was held on July 18, 2013, to develop plausible future scenario of socio-economic and bio-physical variables, which, along with climatic variables affect agricultural productivity. It is a part of the research project entitled Integrated Assessment of Climate Change Impact on Principal Crops and Farm Household Incomes in Southern India and is being implemented by the Department of Agricultural Economics, CARDS, in collaboration with the Agro-Climatological Research Centre, TNAU and Acharya N.G. Ranga Agricultural University, Hyderabad. This study is a component of the Agricultural Model Inter Comparison and Improvement Project (AgMIP), and funded by USDA and UK Government's DFID and started in January 2013. The Workshop was inaugurated by Dr. K. Ramasamy, Vice Chancellor, TNAU. Dr. P. Paramasivam, Professor of Agricultural Economics, TNAU is the Lead Principal Investigator of the project assisted by a team of economists and agro-climatologists from TNAU and ANGRAU. The main objective of this research is to develop an integrated assessment of impact of climate change on agricultural sector with particular reference to select crops and farming systems. This research also aims to develop possible future impacts of climate change taking into consideration the future changes in climatological, bio-physical, and socio-economic variables. The workshop was attended by economists and scientists from Tamil Nadu, Karnataka, Andhra Pradesh and Puducherry.

## Policy Seminar on Climate Change and Groundwater Dynamics

A Policy Seminar on Climate Change and Ground water Dynamics, funded by the South Asian Network for Development and Environmental Economics (SANDEE), Kathmandu, was held on July 19, 2013. Dr. R. Balasubramanian, Professor and Head of the Department of Agricultural Economics, TNAU and Principal Investigator of the project presented the salient findings of the project for the benefit of scientific community and the farmers who participated in the Seminar. A total of 35 participants including 21 scientists, 12 farmers, and two policy makers participated in the Seminar. There was a lively debate on the policy implications of the project including the regulation of water-intensive crops in groundwater hotspot areas, electricity pricing reforms, and stabilization of surface irrigation sources in order to mitigate the problem of groundwater scarcity, especially in the climate change scenario.

## Parthenium Awareness training to the Rural school students at KVK, Vridhachalam



Parthenium awareness week was conducted at KVK, Vridhachalam on 16-22, August, 2013. As a part of the programme, 100 students from Fatima Matric Higher Secondary School, Vridhachalam participated. Parthenium is a toxic weed that affects the crop growth and creates pollution to the ecosystem. In order to eradicate this toxic weed, the Directorate of Weed Science Research, Jabalpur observes Parthenium Awareness Week from August 16 to 23 every year all over India to create awareness about the ill effects and control of this toxic weed to the public and school students.

As a part of this programme, the KVK, Vridhachalam conducted a one day Campaign cum Training on Parthenium and its Control to the rural students on 19.8.2013. Dr. R. Arunachalam,

Programme Coordinator of the KVK welcomed the participants and narrated the ill effects of parthenium and its effective control. Dr. T. Saravanan, Assistant Professor (Plant Pathology) and Dr. V. Vijaya Geetha, Assistant Professor (Seed Science and Technology) gave lectures on parthenium and demonstrated the management aspects of parthenium.

## Diploma Course in Horticulture Introduced



The Inaugural function of Diploma in Horticulture Programme was conducted at Horticultural Research Station, Pechiparai on 7<sup>th</sup> August 2013. Dr. S. Mariappan, Dean i/c (Hort) inaugurated the programme as Chief Guest and delivered the Inaugural Address. Dr. M.A.K. Pillai, Dean AC&RI, Killikulam indicated the opportunities available for such Diploma holders. Dr. R. Kannan, Principal, Institute of Horticulture, Horticultural Research Station, Pechiparai welcomed the Chief Guest and other dignitaries which was followed by lighting of Kuthuvilakku. Dr. P. Nainar, Professor and Head, FRS, Thovalai and Dr. J. Jane Sujatha, Professor and Head, KVK, Pechiparai felicitated. Dr. J. Prem Joshua, Professor (Hort.) proposed a vote of thanks.

## Workshop on Resource based Micro-level Planning and Execution



A one day workshop on Resource based Micro-level Planning and Execution was held at the Collectorate of Thiruvarur District on 29.07.2013. The Department of Remote Sensing and GIS, TNAU,



Coimbatore, organized this workshop in collaboration with National Bureau of Soil Survey and Land Use Planning (NBSS & LUP), Regional Centre, Bengaluru. Dr. K. Ramasamy, Vice Chancellor, TNAU in his Special Address emphasized the need for conservation of soil and water resources to enhance the crop production in Thiruvapur district since these resources are becoming scarce. Thiru. C. Natarajan, I.A.S., District Collector in his Presidential Address indicated that the development plan must include, the three zones, viz., Red Soil Zone, Alluvial Zone and Clay Soil Zone of the district for effective implementation. Dr. A. Natarajan Principal Scientist and other scientists from NBSS & LUP, Bengaluru presented the need and methodology of the

'resource based micro-level planning'. The officials from the Department of Agriculture and line departments of Thiruvapur district, Director, Tamil Nadu Rice Research Institute, Scientists from Krishi Vigyan Kendra, Needamangalam and Sikkal participated in the workshop. Dr. R. Sivasamy, Professor and Head, Department of Remote Sensing and GIS, TNAU, Coimbatore welcomed the gathering. Dr. R. Rajendran, Director, Tamil Nadu Rice Research Institute, proposed a vote of thanks. The workshop was coordinated by Thiru K. Mayilvaganan, Deputy Director of Agriculture, Thiruvapur district and Dr. K. Chozhan, Programme Co-ordinator, Krishi Vigyan Kendra, Needamangalam.

### NEW SCHEMES

S. No.	Name of the Scheme	Principal / Co-Principal Investigator	Budget (Lakhs)	Funding agency
1	Techno-Economic Empowerment of Dry Land Farm Women for Livelihood Security Under Millets (Underutilized Crops) based Eco-System --Whole Farm Approach"	PI Dr. J. Pushpa, Professor, (Agricultural Extension).	15,28,650	GOI -DST-Seed Division, Ministry of Science and Technology, Department of Science and Technology New Delhi.
2	Formulation of Probiotic Millet Fruit Bar	PI Dr. R. Vijayalakshmi, Assistant Professor, Home Science College and Research Institute, Madurai.	10.88	UGC, New Delhi.
3	Developing Spectral Library and Spectral Indices for Early Prediction of Crop Nutrient Deficiencies	PI Dr. R. Jagadeeswaran, Assistant Professor, (SS&AC), Department of Remote Sensing and GIS, TNAU, Coimbatore.	11.70	DST- Science and Engineering Research Board.
4	Preparation of Complementary Media for PGDAEM courses – English Version	PI Dr. H. Philip, Professor and Head, Training Division, Directorate of Extension Education, TNAU, Coimbatore.	11.50	National Institute of Agricultural Extension Management (MANAGE), Hyderabad.

5	Preparation of Complementary Media for PGDAEM courses – Hindi Version	PI Dr. H. Philip, Professor and Head, Training Division, Directorate of Extension Education, TNAU, Coimbatore.	11.50	National Institute of Agricultural Extension Management (MANAGE), Hyderabad.
6	Social Science Network Project on Regional Crop Planning for Improving Resource Use Efficiency and Sustainability	PI Dr. M. Chinnadurai, Director, CARDS, TNAU, Coimbatore  CO- PI Dr. M. Chandrasekaran, Director, DPM, TNAU, Coimbatore  Dr. R. Balasubramanian, Professor and Head, Dept. of Agri. Economics, TNAU, Coimbatore  Dr. K.R. Karunakaran, Professor, Dept. of Agri. Economics, TNAU, Coimbatore	35,00,000	Sponsored by ICAR-NCAP, New Delhi.

### Important Visitors

Dr. A. J. Prabhakaran, Principal Scientist and Project Investigator AICRP-Castor Scheme, DOR, Hyderabad visited TCRS, Yethapur on 09.07.2013 to discuss with the AICRP - Castor scientists about technical programme to be implemented in kharif 2013 and also to chalk out the programme for CMS development in castor.

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