



# CTRI News

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CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY-533 105, A.P.

## From the Director's Desk



During the last three months period, FCV tobacco auctions in Karnataka were completed. At present, about 102 million kg cured leaf has been marketed at an average price of Rs.129.24/- per kg. Thus, the KLS farmers received Rs. 8.72 per kg more over last year.

As on 31.03.2014, in Andhra Pradesh, 20.07 million kg of FCV tobacco has been marketed at an average price of Rs.121.59/-. The price offered for bright grade of tobacco is Rs.122.91/- per kg.

The Indian Council of Agricultural Research constituted Quinquennial Review Team (QRT) under the Chairmanship of Dr. R.R. Hanchinal, Chairperson, Protection of Plant Varieties and Farmers Right Authority, Govt. of India to review the research work carried out by CTRI, AINPT and KVKs. The team will visit CTRI and its Research Stations, AINP Centres and KVKs and review the research work carried during the period 2009-2013 and give suggestions for future improvement of research programmes.

A total of 1200 kg foundation seed of FCV tobacco was distributed to registered growers in KLS through CTRI RS, Hunsur and Tobacco Board at different auction floors.

(T.G.K. MURTHY)

## RESEARCH HIGHLIGHTS

- New fungicides, Fenamidon 10%+mancozeb 50% @ 0.3% and pyraclostrobin 5% +metiram 55% @ 0.2% were found effective against leaf blight caused by *Phytophthora parasitica var.nicotianae* in tobacco nurseries.
- Hi-tech sprayer at 40 PSI @ 95 l/ha gave better coverage of spray fluid on the plant canopy up to 50 DAT. Thereafter, high pressure knap sack sprayer (HPKS) @ 50 l/ha exhibited better coverage.
- Leaf surface wash of *N. gossei* with di-chloromethane proved toxic to neonate larvae of *Spodoptera litura*
- Chlorfluzuron 5.4 E.C. @ 3 ml./l was effective against *S. litura* in tobacco nursery.
- Flubendiamide 20 WG @ 6 grams/10l was effective against tobacco budworm/ capsule borer *H. armigera* in tobacco field crop.
- Flonicamid 0.02% and pymetrozine 0.02% were found to be effective against tobacco aphid, *Myzus nicotianae* and also safe to the aphid predators *Xanthogramma scutellare* and *Coccinella repanda*.
- Molecular characterization of 17 *Pythium* isolates with complete ITS sequence was carried out.
- SSR primers viz., PT53418, PT51706, PT60080, PT52831, PT40035 and TBM-36 were found polymorphic among 19 tobacco lines including 11 parents differing in solanesol and nicotine and eight hybrids.

## MONITORING OF TRIAL PLOTS

- Monitoring team consisting of Dr. T.G.K. Murthy, Dr. U. Sreedhar, Dr. D. Damodar Reddy, Dr. C. Chandrasekhara Rao, Dr. K. Sarala and Dr. Y. Subbaiah visited on-farm varietal trial plots of Tobios-2 and NLS-4 at NLS along with Trade and Tobacco Board officials on 04.01.2014.



- Dr. K. Sarala, Dr. Y. Subbaiah and Dr. P. Venkateswarlu, Principal Scientists visited on-farm varietal trial plots of FCV tobacco line, TBST-2 in SLS and SBS areas during 21-22 January, 2014.



- Dr. M.Kumaresan, Principal Scientist & Head I/C, Sri. M.Mohan, CTO and Sri R. Rajendran, STO visited the farmers' trial plot fields in Satyanathapuram, Kethaiyarabu and Oddanchatiram.

## FIELD FRIENDS PROGRAMME

- Scientists from CTRI, CTRI Research Station, Guntur, Kandukur participated in 22 Field Friends Programmes conducted by Tobacco Board at Rajahmundry, Ongole and Guntur regions.

## TRANSFER OF TECHNOLOGY

### PUBLICATIONS

- ❖ Damodar Reddy, D. and V.K. Murthy. 2013. Simple and inexpensive water extraction method for assaying potassium concentration in tobacco plant tissue. **Commun. Soil Sci. and Plant Analysis** 44:962-70.
- ❖ Damodar Reddy, D., S. Kushwaha, S. Srivastava and R.S. Khamparia. 2014. Long-term wheat residue management and supplementary nutrient input effects on phosphorus fractions and adsorption behaviour in a Vertisol. **Commun. Soil Sci. and Plant Analysis** 45:541-54.
- ❖ Ghosh, R.K. and D. Damodar Reddy. 2013. Tobacco stem ash as an adsorbent for removal of methylene blue from aqueous solution: Equilibrium, kinetics and mechanism of adsorption. **Water Air Soil Pollution** 224(6). DOI: 10.1007/s11270-013-1582-5.
- ❖ Ghosh, R.K. and D. Damodar Reddy. 2013. Crop residue ashes as adsorbents for basic dye (methylene blue) removal: Adsorption kinetics and dynamics. **Clean-Soil Air Water** 41. DOI:10.1002/clen.201300386.
- ❖ Ghosh, R.K., Z.S. Khan, C.V.N. Rao, K. Banerjee, D. Damodar Reddy, T.G.K. Murthy, N. Johnson and D.P. Ray. 2014. Assessment of organochlorine pesticide residues in Indian flue-cured tobacco with gas chromatography-single quadrupole mass spectrometer. **Environ. Monitoring & Assessment** DOI:10.1007/s10661-014-3760-3.
- ❖ Suman Kalyani, K., T.G.K. Murthy and C. Chandrasekhara Rao. 2014. Innovative approaches for sustainable productivity among tribal families of East Godavari District. **J. Agril. Ext. Rural Development** 6(1):5-10.

### Popular Articles

- ❖ Suman Kalyani, K., T.G.K. Murthy and V.S.G.R. Naidu.

2014. Soya as intercrop in banana for higher yields. **Annadata** 46(2):22-3.

- ❖ Suman Kalyani, K. and T.G.K. Murthy. 2014. Krishi Vasant. **Annadata** 46(3):31-2.
- ❖ Suman Kalyani, K. and T.G.K. Murthy. 2014. Uses of neem in tobacco. **Swarna Sedyam** : 20-1.
- ❖ Satyavani, J.V.R., V.S.G.R. Naidu, U. Sreedhar and T.G.K. Murthy. 2014. Snails damage on horticultural crops. **Annadata** 46(3): 10-1.

### Brochures

- ❖ 'Cashew – Cultivation Practices' compiled by Dr.V.S.G.R. Naidu, J.V.R. Satyavani and Dr.T.G.K. Murthy.
- ❖ 'Azolla – Cultivation' compiled by Dr.V.S.G.R. Naidu, Dr. B. Johnbabu and Dr.T.G.K. Murthy.
- ❖ 'Co-4 Fodder – Cultivation' compiled by Dr.V.S.G.R. Naidu, Dr. P.V.V.S. Siva Rao and Dr. T.G.K. Murthy.
- ❖ 'Self employment opportunities through KVK Programmes' compiled by Dr.V.S.G.R. Naidu and Dr. T.G.K. Murthy.
- ❖ 'Technology Inventory on Cashew Production' compiled by Dr.V.S.G.R. Naidu, J.V.R. Satyavani, E. Vijaya Prasad and Dr. T.G.K. Murthy.

### CONFERENCES/ TRAININGS/ WORKSHOPS ATTENDED

- ❑ Sunil Mandi, Head, CTRI RS, Dinhatra attended the 'Midterm Review Meeting of ICAR Regional Committee-II' at CFRI, Barrackpore, Kolkata on 24.01.2014.
- ❑ Dr. P. Venugopala Rao, Senior Scientist attended the 'Interaction Meet on the Presently Used FCV Tobacco Seed Varieties' at Tobacco Board, Guntur on 28.01.2014.
- ❑ Dr. K.Siva Raju, Principal Scientist visited ITC Life Sciences & Technology Centre, ITC Limited, Bangalore as Technical Expert in the team constituted by National Accreditation Board for Testing & Calibration Laboratories, Dept. of Science and Technology, New Delhi during 30-31 January, 2014.
- ❑ Dr. K. Siva Raju, Dr. Y. Subbaiah, Principal Scientists and Dr. H. Ravisankar, Senior Scientist attended the '101 Indian Science Congress' at Jammu University, Jammu during 3-7 February, 2014.
- ❑ Dr. K. Suman Kalyani, Principal Scientist attended the Workshop on 'Policies for Infant & Young Child Feeding' at NIN, Hyderabad on 03.02.2014.
- ❑ Dr. K.Suman Kalyani, Principal Scientist attended workshop on 'Mapping of Current Policies that Support Counseling for Infant and Young Child Feeding (IYCF) in India using the Net-Map Methodology' at National Institute of Nutrition, Hyderabad on 04.02.2014.
- ❑ Md.Elias, Senior Technical Assistant attended the National Conference on 'Agricultural Information Management in Digital Era' at IGKV, Raipur during 4-5 February, 2014.
- ❑ Sunil Mandi, Head, CTRI RS, Dinhatra attended the 'KVK Advisory Committee Meeting' at UBKV, Pundibari, Cooch Behar on 07.02.2014.
- ❑ Dr. U. Sreedhar, Head, Crop Protection attended the 'Workshop to revise IPM packages' at NIPHM, Hyderabad on 08.01.2014
- ❑ Dr. K. Nageswara Rao, Head, CTRI RS, Jeelugumilli, Dr. M. Anuradha, Principal Scientist and Ms. J. Poorna Bindu, Scientist attended the ISPP South Zonal Seminar on 'Physiological and Molecular Interventions for Improving Crop Productivity' at Agril. College, Bapatla on 23.01.2013
- ❑ Dr. K. Siva Raju, Principal Scientist visited Insight Tobacco Craft Institute, Godfrey Phillips India Ltd., Bombay for reassessment of Testing & Calibration Laboratories, Gurgaon at Bombay during 23-24 January, 2014

- ❑ Dr.P.V.Venugopala Rao, Senior Scientist attended the 'Annual Breeder Seed Review Meeting' at NBPGR, New Delhi on 12.02.2014.
- ❑ Dr. V.S.G.R. Naidu, Programme Co-ordinator attended the 'Biennial Conference of Indian Society of Weed Science' at Jabalpur during 15-17 February, 2014.
- ❑ Dr. S. Kasturi Krishna, Principal Scientist attended the Conference on 'Emerging Challenges in Weed Management' at Directorate of Weed Science Research, Jabalpur during 15-17 February, 2014.
- ❑ Sunil Mandi, Head, CTRI RS, Dinhatata attended the 'Advisory Committee Meeting' organized by ACMART at Cooch Behar on 17.02.2014.
- ❑ Dr. S.K. Dam, Senior Technical Officer attended the International Symposium on 'Role of Fungi and Microbes in the 21<sup>st</sup> Century - A Global scenario' at Kolkata during 20-22 February, 2014.
- ❑ Dr. T.G.K. Murthy, Director-Acting and Dr. C.C.S. Rao, Head, Crop Production attended the 'EFC Meeting' at ICAR New Delhi on 21.02.2014.
- ❑ Dr. U. Sreedhar, Head, Crop Protection attended the 'International Conference on Entomology' at Patiala, Punjab during 21-23 February, 2014.
- ❑ Sunil Mandi, Head, CTRI RS, Dinhatata attended the 'Advisory Committee Meeting' at UBKV, Pundibari on 24.02.2014.
- ❑ Dr. C.C.S. Rao, Head, Crop Production attended the 'Third Meeting of the Committee Constituted to Study the Environmental Impact of FCV Tobacco Curing in India - Alternative Fuels to Substitute the Firewood Usage in Curing of FCV Tobacco' at Tobacco Board, Guntur on 24.02.2014.
- ❑ Dr. H. Ravisankar, Senior Scientist attended the Sensitization workshop on 'Internet Protocol Version 6 (IPv6)' at New Delhi on 27.02.2014.
- ❑ Sunil Mandi, Head, CTRI RS, Dinhatata attended the Workshop on 'Jute and Allied Fibers' at

UBKV, Pundibari during 28.02.2014 to 01.03.2014.

- ❑ Dr. M. Mahadeva Swamy, Principal Scientist attended the International Symposium on 'Potassium Nutrition and Crop Quality' at BAU, Ranchi during 4-5 March, 2014.
- ❑ Dr. D.V. Subhashini, Principal Scientist attended the National training on 'Microbial Characterisation and Nanoformulations : Methods and Applications' at NBAIM, Kushmaur, Mau, Uttar Pradesh during 4-13 March, 2014.
- ❑ Dr. U.Sreedhar, Head, Crop Protection attended the 'CORESTA Infestation Control Conference' at Bangalore during 10-11 March, 2014.
- ❑ Dr. S. Ramakrishnan, Principal Scientist attended the '137<sup>th</sup> Meeting of the Tobacco' at Tobacco Board, Bangalore on 21.03.2014.

#### KISAN MELA/ EXHIBITION STALLS

- ❑ CTRI RS, Dinhatata participated in the Kisan Mela and Exhibition organized by State Agriculture Department, West Bengal at Sitai block & Sitalkuchi block, Dinhatata from 18.01.14 to 21.01.14. Sri S. Chanda Technical officer gave a talk on 'Tobacco Production and Protection Issues' to farmers.
- ❑ CTRI set up a stall at Krishi Vasant, a national level agriculture fair-cum-exhibition organized jointly by the Ministry of Agriculture and Maharashtra Government in collaboration with CII at Nagpur during 7-11 February, 2014.

#### IJSC MEETING

The 4<sup>th</sup> meeting of the XII Institute Joint Staff Council was held on 26.02.2014 at CTRI Research Station, Dinhatata and wherein various issues related to staff welfare were discussed.



#### TRAINING PROGRAMME/ WORKSHOP ORGANISED

- ❑ A 'Training Programme on Good Agricultural Practices of FCV Tobacco Cultivation' was conducted during 7-9 January, 2014 to the newly recruited Field Officers of Tobacco Board and Alliance One International India Pvt. Ltd., Pottur, Guntur.
- ❑ CTRI organised one day Workshop on 'Tobacco Production Technologies' to the growers of Auction Platforms under Rajahmundry Regional Office jurisdiction at CTRI, Rajahmundry on 04.03.2014.

#### Training programmes for SHGs

- ❑ Ten training programmes were conducted for SHGs of tribal villages in Rampachodavaram and Maredumilli mandals of East Godavari district, A.P. during January-February, 2014.

#### AWARDS

- ❑ Dr.V.S.G.R. Naidu, Programme Coordinator, KVK received "Best Publication Award" of DWSR, Jabalpur from the Vice-Chancellor, Krishi Vidyapeeth, Jabalpur for his publication 'Weed Identification'.



- ❑ Third prize was awarded to the poster entitled "Present practices and future strategies of CTRI Library in Digital Era" by Md. Elias and M. Anuradha at National Conference on 'Agricultural Information Management in Digital Era' held at IGKV, Raipur during 4-5 February, 2014.



### Fellow of ESI

Dr. U. Sreedhar, Principal Scientist & Head, Crop Protection was elected as Fellow of Entomological Society of India (FESI).

### M.Phil Awarded



Sri Garaga S.N. Murthy, STA, was awarded the Degree of Master of Philosophy in Botany by the Periyar University, Tamil Nadu.

### VISITORS

- ❖ ADG (Commercial Crops), ICAR, New Delhi and Dr. G.N. Mishra, Principal Scientist (Commercial Crops) visited CTRI Research Station, Dinahata on 01.03.2014.
- ❖ Dr. Leonardo Caruso and Dr. Marco Prat, Scientists from Japan Tobacco International (JTI) visited CTRI, Rajahmundry on 30.01.2014. An Interaction meeting was arranged with scientists of CTRI, in connection with their visit.
- ❖ A team of 7 farmers from Ceylon Tobacco Company, Srilanka along with Sri N.P.C. De Silva, Additional Director (Agricultural Extension) and Sri Dhammine Gunaratn, Executive of CTC, Srilanka visited CTRI, Rajahmundry on 17.03.2014

### Students visits

- ❖ A total of 12 B.Sc. (Ag.) students from ANGRAU, Rajendranagar, Hyderabad visited CTRI, Rajahmundry on 27.01.2014.
- ❖ A total of 60 students from S.K.B.R. College, Amalapuram visited CTRI, Rajahmundry on 28.01.2014.
- ❖ A total of 65 B. Sc. (Biotechnology) students from Vishnu College of Engineering, Bhimavaram visited CTRI, Rajahmundry on 30.01.2014.
- ❖ A total of 60 Polytechnic students from Maruteru visited CTRI, Rajahmundry on 21.03.2014.

### KRISHI VIGYAN KENDRA

During the period, KVK organised the following programmes at KVK, Kalavacharla.

- ❑ District level Seminar on Cashew on 04.01.2014.
- ❑ Cocoa Training Programme from 05.01.2014 to 07.04.2014.
- ❑ Internship Programme of U.G (Home Science) students from 20.01.14 to 08.03.14.
- ❑ Interface meeting of Research-Extension-Farmers on 'Training Needs for Village Based Dairy Development' on 24.01.2014.
- ❑ State-level Seminar on Cashew during 7- 8 March, 2014.
- ❑ Two months duration on-campus training programme on 'Coir and Yarn Making' during 01.02.2014 to 31.03.2014.
- ❑ Two months duration off-campus training programme on 'Garment Making' during 05.02.2014 to 04.04.2014.
- ❑ Two months duration off-campus training on 'Skill Upgradation Training Programme' during 10.02.2014 to 09.04.2014.
- ❑ Thirty FLDs on Pulses were conducted and critical inputs were distributed to farmers.

### Exposure Visit

Dr. P.V.V.S. Siva Rao participated in 'Dairy Expo' at Chikoda of Gujarat State on 18.01.2014.

### Supply of Vegetable Seedlings to ATMA

40,000 hybrid vegetable seedlings of brinjal, chillies and tomato were supplied for needy farmers in the district.

### Radio Talk

Dr. B. Johnbabu, CTO gave a talk on Backyard Poultry (in Telugu) on AIR, Visakhapatnam on 06.03.2014.

### TV Show

Programmes on Capsicum cultivation, Vegetable seedlings production in pro trays, Crossander cultivation and value addition to Cocoa was telecasted on hmTV for two weeks, starting from 15.1.2014.

### MEETINGS/ VISITS OF DR. T.G.K. MURTHY, DIRECTOR-ACTING, CTRI

- Monitoring visit to On-Farm trials with pipeline variety Tobios-2 and NLST-4 in Northern Light Soil areas viz., Gopalapuram, Buttaigudem, J a n g a r e d d y g u d e m , Kotanagavaram & Jeelugumilli villages along with Project Monitoring and Evaluation Team of CTRI on 04.01.2014.
- Attended the Annual Conference of Vice-Chancellors of Agril. Universities and Directors of ICAR at Baramati, Maharashtra during 19-20 January, 2014.
- Visited AINP(T) Centre, Anand (Gujarat) and reviewed the experiments/ projects of AINP(T) and surveyed farmers' fields along with Dr. U. Sreedhar, Member, Project Monitoring and Evaluation Team during 8-9 February, 2014.
- Attended final 'XII Plan EFC Meeting of DARE/ICAR' under the chairmanship of the Secretary, DARE & DG, ICAR at Krishi Bhavan, New Delhi during 21-22 February, 2014.

### PERSONALIA

- Sri D. Narasimha Rao, Technician, CTRI RS, Jeelugumilli retired from the Council's service on 31.01.2014.
- Sri Ramachandre Gowda, Technical Officer, CTRI RS, Hunsur retired from the Council's service on 28.02.2014.
- Smt. Poluri Rathamma, SSS, CTRI RS, Kandukur retired from the Council's service on 01.03.2014.
- Sri Md. Abul Miah, SSS, CTRI RS, Dinahata retired from the Council's service on 31.03.2014.

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