



CTRI News

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ICAR - CENTRAL TOBACCO RESEARCH INSTITUTE - 533105, A.P.

From the Director's Desk

FCV tobacco auctions are in progress in Andhra Pradesh. 128.6 M kg tobacco was marketed at an average price of Rs. 119.28 per kg. In Karnataka, plantings are in progress and nearly 80% of the area was transplanted. About 88% of the area has been occupied by ruling variety Kanchan rest by CH-3 (Hybrid) and FCH-222, a fusarium wilt resistant variety.

The Budget outlay for CTRI for the year 2014-15 is Rs. 165 lakhs and for AINPT is Rs. 425 lakhs.

The Research Advisory Committee (RAC) meeting held in the May, 2014 reviewed the research progress and given advices for formulating future research programmes. The Committee also recommended to expand the research mandate of the Institute by inclusion of more number of crops. RAC also suggested to develop tobacco varieties for alternative uses, mechanisation of tobacco cultivation, comprehensive efforts on precision farming with all types of tobaccos for effective utilisation of natural resources and external inputs, use of biopesticides/ botanicals for control of pests and diseases, etc.

(T.G.K. MURTHY)

RESEARCH HIGHLIGHTS

- ❖ ITS regions of 17 *Pythium* isolates were sequenced.
- ❖ Twenty five *Nicotiana* species accessions were amplified with trnH psbA primer and amplicons purified for sequencing studies.
- ❖ In the manufacturing test, low tar line JS-117 recorded low tar content (22.8 mg/cigarette; 37.6 mg/g dry tobacco) than the control, Kanchan (24.1 mg/cigarette; 46 mg/g dry tobacco).
- ❖ Application of *Pochania chlamidospora* in combination with *Trichoderma viride* in solarized nursery beds reduced the incidence of damping-off and root-knot nematode as compared to check in KLS.
- ❖ Five pipe line varieties (JS-117, TBST-2, Tobios-2, NLST-4 and YB-4) one germplasm line (324 C) and three released tobacco varieties (Siri, Kanchan and Banket A1) were analysed with 10 selected SSR primers for finger printing. Three primers viz., NSTM 12, PT-15706 and PT-53418 found to generate polymorphic fingerprints and others were monomorphic.
- ❖ Nineteen high yielding FCV advanced breeding lines were advanced to AINPT multi-location trials for evaluation.
- ❖ Three genotypes viz., ruling variety Siri, promising advanced interspecific cross derivative TBST-2 and unique germplasm, 324C were characterized for 53 morphological DUS characteristics.
- ❖ Oil content ranged from 35.44% to 41.48% in the twenty white and two black seed breeding lines and five germplasm lines.
- ❖ A total of 178 bidi, 3 rustica and 75 Natu besides 5 exotic FCV lines have been added to the germplasm bank, thereby increasing the CTRI genetic resources to 3369.
- ❖ Among four house keeping genes (Rbcs, EF-1 α , L25 and tubA1) screened for their expression in *Pythium* infected tobacco genotypes at different time intervals, Rbcs and EF-1 α showed relatively stable expression under stress condition.
- ❖ Defense related genes viz., NtSIPK, Ntf4 and NtMEK2, PR1a, PAL1 and Glunse showed differential expression pattern in control and *Pythium* infected samples.

TRANSFER OF TECHNOLOGY

PUBLICATIONS

- ❖ Ravisankar, H., U. Sreedhar and K. Sivaraju. 2014. Expert system for insects pests of agricultural crops. **Indian J. Agril. Sci.** 84(5): 607-11.
- ❖ Suman Kalyani, K. and T.G.K. Murthy. 2014. Value added food products with Solar energy. **Annadata** 46(4):18-20.
- ❖ Suman Kalyani, K. and T.G.K. Murthy. 2014. Amla – Rich sources of medicinal values. **Agriclinics** 4(11):48-50.
- ❖ Suman Kalyani, K. and T.G.K. Murthy. 2014. Control of Anemia through balanced diet among women & children. **Annadata** 46(5):18-9.
- ❖ Suman Kalyani, K. and T.G.K. Murthy. 2014. Rehydrated drinks for dehydration in summer. **Agriclinics** 4(12):46-7.
- ❖ Suman Kalyani, K. and T.G.K. Murthy. 2014. Rainbow of colourful fruits & vegetables – their nutritional values. **Annadata** 46(6):67-8.

CONFERENCES/ TRAININGS/ WORKSHOPS ATTENDED

- ❑ Dr. S. Ramakrishnan, Principal Scientist & Head i/c, CTRI RS, Hunsur attended meeting on National Workshop on 'Emergence of nematode diseases of Karnataka' at UAS, Shimoga, Karnataka and presented invited lecture on "Emerging nematode problems in FCV tobacco of Karnataka" on 7.4.2014.
- ❑ Dr. P. Venkateswarlu, Principal Scientist & Head i/c, CTRI RS, Guntur attended the meeting on 'Physical analysis of the redried threshed lamina of tobacco' at Tobacco Board, Guntur on 25.4.2014.
- ❑ Dr. M. Kumaresan, Principal Scientist & Head i/c, CTRI RS, Vendasandur attended the XXIV Meeting of the 'Regional Committee No.VIII of ICAR' at CTCRI, Trivandrum, Kerala from 1-3 May, 2014.
- ❑ Dr. S. Ramakrishnan, Principal Scientist & Head i/c, CTRI RS, Hunsur participated in XXIV meeting of 'Regional Committee meeting of ICAR (Zone VIII)' at CTCRI, Trivandrum on 2-3 May, 2014.
- ❑ Dr. C. Chandrasekhara Rao, Nodal Officer, PME Cell attended the PME-IFPRI workshop at New Delhi on 27.05.2014.
- ❑ Dr. K. Siva Raju, Principal Scientist, Division of Crop Chemistry & Soil Science attended the training programme on 'ISO/IEC17025 Assessors' conducted by National Accreditation Board for Testing & Calibration Laboratories" Dept. of Science & Technology at Hyderabad during 26-30 May, 2014.
- ❑ Dr. V.S.G.R. Naidu, Programme Coordinator, KVK, Kalavacharla participated in the Sensitization programme 'Technology management for KVK – Professionals : under NAIP' at NAARM, Hyderabad during 9-11 June, 2014.
- ❑ Dr. C. Chandrasekhara Rao, Principal Scientist & Head i/c, Crop Production attended the meeting at Tobacco Board, Guntur to assess the environmental impact of FCV tobacco curing in India on 18.06.2014.
- ❑ Sri Sunil Mandi, Scientist & Head i/c, CTRI RS, Dinahata attended 'Meeting of ICAR Regional Committee-II' at CIFRI, Barrackpore during 27-28 June, 2014.

RAC MEETING

The Research Advisory Committee (RAC) meeting of CTRI was held during 22-23 May, 2014 at CTRI, Rajahmundry under the Chairmanship of Dr. P. Murugesu Boopathi, Former Vice-Chancellor, Tamil Nadu Agricultural University, Coimbatore. The Chairman along with members of RAC viz., Dr. V. S. Korikanthimath, Dr. V. R. Rao and Dr. R. Sridhar, Sri Ch. Venkataswamy, Member, IMC, reviewed the research activities and achievements of the Institute during 2013-14 and gave a few direction for further improvement of the programmes. Dr. T.G.K. Murthy, Director-Acting, CTRI, and Dr. C. Chandrasekhararao, Member-Secretary, RAC, Heads of Divisions, Heads of Research Stations and Scientists also participated in the meeting.



TRAINING PROGRAMME/ WORKSHOP ORGANISED

□ A training programme on "Solar Dried Food Products and Value addition" was organised at the Central Tobacco Research Institute, Rajahmundry for SHGs of Rampachodvaram and Maredumilli mandals during 2-4 June, 2014. About 30 tribal women were trained in preparation of solar dried food products viz., mango jelly, *aamchur*, *tooty fruity*, *amla* candy, *amla supari*, desiccated coconut powder, vegetable chips, mixed fruit jellies, mushroom chips, herbal powders etc.



□ Conducted a 21 day training programme (from 24.04.2014 to 16.05.2014) on DTP & E-Commerce for 20 rural youth of Kalavacharla village, Rajanagaram mandal by KVK, Kalavacharla in collaboration with AKMU, CTRI, Rajahmundry with a view to providing hands-on experience on various software packages viz., Tally, Photoshop, Pagemaker, MS Office besides imparting training on use of Internet for various purposes.



□ A long duration training programme (15 days) on value addition and fashion technology in garment making was conducted at I. Polavaram during 16-30 June, 2014. Twenty tribal women were trained in preparation of apparel.

□ A training and demonstration programme on preparation 'by-products of Neem products (NSKS, NSKS)' for tribal farmers was conducted on 16.04.2014.

□ Training was given on 'Importance of summer ploughing & green manuring' at Devarapalli, Sunnampadu & Rampachodavaram on 24.04.2014.

□ A training programme on 'Vocational skills up-gradation in tribal youth' was conducted at Devarapalli, Sunnampadu & Kutravada on 21.05.2014.

□ Scientists and technical staff of CTRI Research Station, Hunsur attended 5 nursery training and 10 field crop management programmes during the quarter, April-June, 2014 and imparted training on various aspects of tobacco cultivation to the farmers.



Field crop management programme

□ Dr. S. Ramakrishnan and Dr. M. Mahadevaswamy, Principal Scientists attended 'Inaugural workshop on PPHM' organized by ITC ILTD at Teliginakoppalu, Karnataka on 16.06.2014.

□ Head i/c and scientists of CTRI RS, Hunsur participated in 'Field day' organized by M/s GPI at Nagenalli, Karnataka on 19.06.2014.



RECREATION PARK

With a view to utilizing the waste and weed infested open land behind the phytochemicals laboratory in the Kirshi Vihar for free movement and recreation of inmates, weeding leveling, planting of a few ornamental plants and medicinal plants etc. was carried out. The recreation park was opened on 02.04.2014 for the benefit of the Krishi Vihar inmates.

FIELD VISIT

□ Dr.D. Damodar Reddy, Dr. C.C.S. Rao and Dr. Y. Subbaiah visited Sri Bondala Reddaiah farm, Achiahpalem village, W.G. Dist. on 11.04.2014 and examined the advantages of curing barn modified by the farmer with respect to energy and time saving.

□ Dr. Y. Subbaiah visited SLS & SBS areas and interacted with farmers of varietal OFT plots. Farmers feed back about the performance of promising Line TBST-2 was recorded.

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

- Attended 78th Meeting of Registration Committee for Growers and Others at Tobacco Board, Guntur and inspected the CTRI Research Station, Guntur on 11.04.2014.
- Inspected the burley tobacco on-farm trials at Ongole of Southern Light Soils area and inspected the CTRI Research Station, Kandukur and farm fields on 12.04.2014.
- Attended the Interface Conference of the Vice-Chancellors of Agril. Universities and Directors of ICAR Institutes at New Delhi on 28.4.2014.
- Attended meeting with ADG (CC) and Director (CS) at ICAR, New Delhi on 29.4.2014.
- Attended the Selection Committee meeting at ASRB, New Delhi on 13.5.2014.
- Attended the Foundation Day Lecture of National Academy of Agricultural Sciences at NASC Complex, New Delhi on 5.6.2014.
- Attended the 'Special Interaction Meeting' with all ICAR Directors by the Hon'ble Director-General, ICAR and Workshop on 'Impact of Capacity Building programmes under NAIP' at New Delhi on 6.6.2014.
- Attended important administrative works at Director (CS) and ADG(CC) office at ICAR, New Delhi on 06.06.2014.
- Attended NAIP-IFPRI workshop on "Impact assessment of capacity building programmes, Future Strategy for capacity building programmes & challenges and opportunities in developing capacity building programmes" at New Delhi on 7.6.2014.
- Attended the Final Meeting of Committee constituted to examine the issue of shifting tobacco cultivation from Black soils Thorredu Auction Platform to Light soil, Tobacco Board office, Guntur on 18.6.2014 and inspected the CTRI Research Station, Guntur and monitored the research and administration activities.
- Attended the first QRT Meeting of CTRI in the office of Deputy Director-General (Crop Science), ICAR, New Delhi on 23.6.2014.

VISITORS

- ❖ A total of 62 Ag. M.Sc. Biotechnology students from Dr. V.S. Krishna Govt. Degree and PG College, Visakhapatnam visited CTRI, Rajahmundry on 03.04.2014.

CTRI RS, Vedasandur

- ❖ B.Sc. (Ag) students from Pandit Jawaharlal Nehru College Agriculture and Research Institute, Karaikal visited the station on 10.06.14 and were explained about the research activities of the station.
- ❖ M.Sc. (Hort) students from Tamil Nadu Agricultural University, Horticultural College and Research Institute, Periyakulam visited the station on 16.06.14 and were explained about the research activities of the station.

PERSONALIA

Appointments

- Sri K. Vijaya Raju and Sri G. Ramakrishna Raju, TSCLs, CTRI, Rajahmundry have been absorbed into SSS w.e.f. 24.04.2014 and 25.04.2014, respectively.
- Sri Manchala Prasad, Sri D.V. Rama Rao, Sri Manchala Raju, Sri P. Srinivasa Rao, Sri T. Sankara Rao, TSCLs, CTRI RS, Guntur have been absorbed into SSS w.e.f. 01.05.2014.

Retirements

- Sri A.D.V. Prasad, Technical Officer, CTRI, Rajahmundry retired from the Council's service on 31.05.2014.
- Sri S. Ganga Raju, SSS, CTRI, Rajahmundry retired from the Council's service on 30.06.2014.

- Sri R. Balaswamy, SSS, CTRI RS, Guntur retired from the Council's service on 30.06.2014.

KVK

KVK organised the following programmes:

- Scientific Advisory Committee Meeting on 09.04.2014.
- Annual Action Plan and Review meetings of KVKs during 2-4 May, 2014.
- State-level Technical Programme (SLTP) during 12-14 May, 2014.
- ATMA Governing Body Meeting on 06.06.2014.
- NAARM Training Programme during 09-11 June, 2014.
- Tribal Sub-Plan Meeting on 18.06.2014.
- Demonstrations on Cashew Apple Utilisation on 8th, 12th, 14th and 16th May, 2014.