CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY - 533 105

RESEARCH HIGHLIGHTS

CTRI, Rajahmundry

- ☐ The physical and chemical properties of tobacco seed oil were evaluated. The results revealed that the refractive index was 1.47 and specific gravity, 1.14 with an acid value of 4.52. The saponification value was 187 and iodine value was143 with 2.51% unsaponifiable matter.
- Benefit: cost ratio for soybeanbengalgram crop sequence is higher compared to the sole FCV tobacco crop in Northern black soils.
- □ Procedure for isolation of sugar esters from the leaf surface wash of wild *Nicotiana* sp. was standardized using solvent partitioning. The extracts from *N. gossei* and *N. trigonophylla* were found to be toxic to the adults and nymphs of *M. nicotianae* by topical application.
- □ The mirid bug, *N.tenuis* was not found to be predating actively on the nymphs and adults of *M. nicotianae* compared to its predatory potential against neonate larvae of *S. litura* or *H. armigera.*
- Among the three modules (IPM, chemical control, bio-intensive) evaluated, IPM module proved superior in terms of less pest infestation and more yield as compared to the other two modules. Bio-intensive module

- plot recorded the higher pest infestation and lower yields as compared to the other two modules.

 Under Integrated Management studies, a organics and inorganic ratio was found to be
- □ Four transgenic and three transplastomic *Bt* lines were screened against tobacco caterpillar and budworm. Larval growth and leaf damage in transgenics is less compared to the controls. Transplastomics were found to be tolerant to budworm.
- ☐ Fifty two somaclones were inoculated with CMV virus. Seven Kanchan somaclones were characterised using 17 RAPD and 6 SSR primers. Thirteen VT 1158 somaclones were characterised using 31 RAPD and 8 SSR primers.

CTRI RS, Hunsur, Karnataka

- ☐ In the organic tobacco trial, there was reduction in yield by 35% but the grade out turn was higher by 79% compared to the control at CTRI RS, Hunsur.
- ☐ Ten advanced breeding lines having resistance to Fusarium wilt, were significantly superior to Kanchan in yield attributes.
- ☐ Integrated *Fusarium* wilt disease management strategy was developed and recommended for use by the farmers in Karnataka for the control of wilt disease.

Management studies, application of organics and inorganics at 25:75 ratio was found to be optimum for getting higher cured leaf yield and Bright Grade Index compared to 50:50 or 75:25 ratio under KLS conditions.

Field SRCs

- ☐ Field SRC was organized at CTRI Black Soil Farm, Katheru on 9.1.2007 to review the progress of work of the on-going projects.
- ☐ Field SRC was organized to monitor the Institute projects and AINRPT experiments at CTRI Research Station, Jeelugumilli on 11.1.2007.
- ☐ Field SRC was organized to monitor the AINRPT experiments at CTRI Black Soil Farm, Katheru on 1.2.2007.



Field visit in Black Soil Farm, Katheru

TRANSFER OF TECHNOLOGY

RYTHU SADASSU

- Rythu Sadassu was organized at **CTRI** Research Station, Kandukur on 6.1.2007. Dr. V. Krishnamurthy, Director, CTRI presided over the function. Sri Ch. Venkateswara Rao, Member. Tobacco Board. Sri V.Venkatarami Reddy, Regional Manager, Tobacco Board, Ongole, Sri G. Seetaramaiah, Former Vice-Chairman, Tobacco Board and Dr. K. Nageswara Rao, Sr. Scientist, CTRI attended the meting. About 500 tobacco farmers from SLS and SBS regions have participated. Eight progressive farmers were felicitated.
- Rythu Sadassu was organized at CTRI Research Station. Guntur 18.1.2007. Dr. Krishnamurthy, Director, CTRI presided over the function and Smt. G. Jayalakshmi, IAS, Collector, Guntur District participated as Chief Guest. Dr. Raghavaiah, Principal Scientist, LAM Farm, Guntur, Sri P. Ajith Kumar, Joint Director of Agriculture, Guntur, Sri P. Gangadhara Prasad, Secretary, Tobacco Board, Guntur, Dr. C.A. Raju, Principal Scientist & Head, Crop Protection and Dr. P. Harishu Kumar, Principal

- Scientist & Head i/c, Crop Production, CTRI have also attended. Nearly 400 farmers from Guntur and Prakasam districts have participated. Eleven progressive farmers were felicitated.
- ☐ Rythu Sadassu was orgnaized at KVK Instructional Farm, Kalavacharla on 27.1.2007. Dr. V. Krishnamurthy, Director, CTRI presided over the function. Dr. S.M. Zaheeruddin, Associate Director, RARS, Maruteru, Sri P. Narasimha Reddy, Joint Director of Agriculture, E.G.Dt. and Dr. Reddy Rao, Joint Director, Animal Husbandry, E.G.Dt. have participated. On this occasion Dr.V. Krishnamurthy, Director distributed fertilizers to FLD beneficiaries under the "Oilseed Development Programme" and
- KRISHI VIGYAN KENDRA KALAVACHARLA

- felicitated 3 progressive farmers. About 650 farmers from different villages have participated.
- ☐ Farmers' Day 2007 was held at CTRI Research Station. Dinhata (W.B.) on 24.2.2007 in which 500 farmers, traders, manufacturers and other dignitaries from the government, State Agricultural University and State Department Agriculture participated in the function. Sri Kiran Kumar Lohar, ADM, Cooch Behar inaugurated the exhibition of tobacco varieties, flower and vegetable show as well the Farmers Day. Dr. S. Amarnath, Principal Scientist & Head i/c welcomed the guests and farmers and Dr. V. Krishnamurthy, Director, CTRI presided over the function.

KISAN MELA

Dr. K. Nageswara Rao and Dr. J.V. Prasad, Sr. Scientists, Sri S. Nageswara Rao and Sri E. Vijaya Prasad, Technical Officers participated in the Kisan Mela organized by RARS at Maruteru on 9.3.2007. An Exhibition Stall was arranged depicting the technologies generated at CTRI and KVK for the benefit of the farming community. Nearly 500 farmers have participated.



Dr. V. Krishnamurthy and Smt. G. Jayalakshmi, IAS, Collector, Guntur district lighting the lamp at the *Rythu Sadassu* at CTRI Research Station, Guntur



Farmers' Day celebration at CTRI Research Station, Dinhata, West Bengal

CONFERENCES/TRAININGS/WORKSHOPS ATTENDED			
SI.No.	Participant (s)	Programme(s) attended	Date and Place
1	Dr. P.R.S. Reddy Dr. C. C. S. Rao Dr. K. Siva Raju Dr. C. A. Raju Dr. J.V. Prasad Dr. R.V. S. Rao Sri H. Ravisankar Dr. M. Mahadevaswamy	94 th Indian Science Congress	3 -7 January, 2007 at Annamalai University, Annamalainagar
2	Dr. Satyajit Roy	National Symposium on 'Plant Pathogens Exploitation and Management'- 59 th Annual meeting of Indian Phytopathological Society	16-18 January, 2007 at Ranidurgavathi University, Jabalpur
3	Dr. V. Krishnamurthy	National Seminar on "Changing Global Vegetables Oils Scenario: Issues and Challenges before India"	30 th January, 2007 at ANGRAU, Hyderabad
4	Dr. K. Palanichamy	National Seminar on 'Changing Global Vegetable Oils Scenario: Issues and Challenges before India'	29-31 January, 2007 at Hyderabad
5	Sri K.N. Subrahmanya	Refresher Course on "Computer Based Multi-media Presentation"	16 th February to 5 th March, 2007 at NAARM, Hyderabad
6	Sri N. Syam Prasad	International Conference on "Semantic Web & Digital Libraries"	21 - 23 February, 2007 at Bangalore
7	Dr. R.V.S. Rao	Training Course on "DUS Testing for Plant Variety Protection: Principles and procedures"	5-9 March, 2007 at IARI, New Delhi
8	Sri S. Jitendranath	HRD training programme on "Organic Agriculture"	8-9 March, 2007 at Ahmednagar
8	Dr. K. Suman Kalyani	Fourth National Extension Education Congress-2007 on ""Livelihood Security Extension System: Perspectives"	9 ⁻ 11 March, 2007 at Jawaharlal Nehru Krishi Vishwa Vidylaya, Jabalpur
8	Dr. U. Sreedhar Dr. J.V. Prasad Dr. M. Mahadevaswamy Dr. S. Ramakrishnan Dr. Satyajit Roy	National Conference on "Organic Waste Utilization and Eco-friendly Technologies for Crop Protection"	15-17 March, 2007, at ANGRAU, Hyderabad
9	Dr. P.V.V.Sivarao Smt. J.V.R. Satyavani	One-day Sensitization and Orientation Workshop	28 th March 2007, at ANGRAU, Hyderabad

PUBLICATIONS

- Arya, R.L., Arya, Kesav, Deo Karan and A.L. Jatav. Indira Agriculture Competition Explorer. Published by Kalyani Publishers, Ludhiana, 2007.
- △ Arya, R.L., J.G. Vashney and L. Kumar. Effect of integrated nutrient application in Chickpea + Mustard intercropping system in the semi-arid tropics of North India. Communications in Soil Science and Plant Analysis 38(1&2):229-40, 2007.
- Suman Kalyani, K., P. Harishu Kumar and G. Adinarayana. Changing trend in the income and expenditure pattern of the tobacco tribal farmers. In Monograph on Rural Development Perspective Socio-economic Ramification. pp 1-8, 2007.

4 CTRI Newsletter

RADIO TALKS

- □ పాగాకు రెలుపు, క్యూరింగులో తీసుకోవలసిన జాగ్రత్తలు by Sri R. Subba Rao, Principal Scientist, on AIR, Visakhapatnam on 24.2.2007.
- పాగాకు రెలుపు తరువాత తీసుకోవలసిన జాగ్రత్తలు by Dr. C.C.S. Rao, Sr. Scientist, on AIR, Visakhapatnam on 18.3.2007.

T.V. TELECAST

□ పాగాకులో సీతాఫలము, సి.ఎం.వి. తెగులు - వాటి నివారణ by Dr. V. Krishnamurthy, Director, CTRI on E-TV on 10.2.2007.

AWARDS AND HONOURS

- □ Young Scientist Award 2007 was conferred on Dr. K. Suman Kalyani for her contribution in the field of Agrl. Extension in the Extension Education Congress held during 9-11 March, 2007 at JNKVV, Jabalpur, Mahdya Pradesh.
- □ Sri A. Muthuraman, A.A.O.(E), CTRI, Rajahmundry has been adjudged as the "Best Administrative Worker" of the Institute for the year 2006.
- ☐ Sri P. Prabhakara Murthy, Assistant, CTRI, Rajahmundry has been adjudged as the "Best Administrative Worker" of the Institute for the year 2005.

APPOINTMENT

Dr. V. Girija Shankar has been appointed as Technical Assistant T-3 (Field/ Farm) at CTRI, Rajahmundry on 22.2.2007.

OBITUARY

Sri S.M. Vali, Assistant, CTRI Research Station, Guntur expired on 13.2.2007.

MEETINGS / VISITS OF DR. V. KRISHNAMURTHY, DIRECTOR, CTRI

- Attended the "Formation Day" celebrations of Tobacco Board, Guntur on 5th Jan., 2007.
- □ Visited the Oilpalm field for providing advisory service to the Oilpalm growers of Krishna and West Godavari Districts along with the team of Scientists from NRC Oilpalm, Pedavegi, West Godavari District on 19th Jan., 2007.
- Attended the 14th Meeting of FADC at the Bureau of Indian Standards, Manak Bhavan, New Delhi on 6th Feb., 2007.
- □ Visited the Indian Institute of Pulses Research (IIPR), Kanpur (U.P.) and went around the Pulses Research Programmes in IIPR Farm fields on 7th Feb., 2007.
- □ Inspected the AINRP(T) Centre, Araul in Kanpur Nagar District of U.P. and monitored the field trials of Hookah and Chewing tobacco on 8th Feb., 2007.
- □ Visited CSAUA&T, Kanpur (U.P.) and had technical discussions with the Vice-Chancellor and the Director of Research on AINRP(Tobacco) trials on 9th Feb., 2007.
- □ Visited the laboratories and Farm fields of IIVR, Adalpura, Varanasi and had discussion with the Scientists on high yielding vegetable crops suitable for coastal agro-ecosystem and procured some vegetable seeds for trials in CTRI and its KVK on 10th Feb., 2007.
- ☐ Inspected AINRP(T) Centre, Pusa and experimental fields of chewing and hookah tobacco field crops at CRP, Pusa and visited ICAR Research Complex for Eastern Region, Patna and

- had technical discussion with the Director i/c on 12^{th} & 13^{th} Feb., 2007.
- □ Visited the Farmers' fields and discussed with the Assam State Agricultural officials on area, production and productivity of different tobaccos in Assam and inspected the trial plots of Hookah and Chewing tobacco in the farmers' fields at Goalpara, Bongaigaon and Chirang districts of Assam state on 26th & 27th Feb., 2007.
- Visited ANGRAU, Hyderabad and held discussions on release of tobacco varieties on 5th March, 2007.
- □ Visited the chewing tobacco areas of Madurai and Ramanad districts of Tamil Nadu on 8th March, 2007.
- ☐ Inspected the CTRI Research Station, Vedasandur and attended the Variety Release Committee meeting of Meenakshi (CR) and Farmers, Traders and Manufacturers Interface Meeting at Vedasandur on 9th March, 2007.
- □ Visited chewing tobacco areas in Gopichettipalayam (Gobi) and Sathyamangalam areas of Erode district of Tamil Nadu on 10th March, 2007.
- □ Visited Pannaikadu, Thandikudi, Perumalmalai areas in Palani – Kodai Hill ranges of Dindigul district and inspected Cigar Binder and Wrapper areas on 11th March, 2007.
- □ Visited Batlagundu, Silverpatty, Devadanapatty and inspected the chewing tobacco areas of Theni district, Tamil Nadu on 12th March, 2007.

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