

CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY - 533 105

RESEARCH HIGHLIGHTS

At CTRI Research Station, Hunsur, thirty one progenies derived from the crosses involving Beinhart 1000-1 and L 1128 (SR) as donors for brown spot disease resistance, recorded low per cent disease index (PDI).

At CTRI Research Station, Hunsur, twelve progenies derived from the cross combinations of K-326 and K-358 with Bhavya and Rathna were found promising with more than 2000 kg/ha yield and desired cured leaf qualities.

□ The FCV tobacco variety Rathna released for Karnataka Light Soils yielded 1530 kg cured leaf, 815 kg bright leaf and 1224 kg grade index per hectare in Southern Light Soils of AP when planted in the 1^{st} week of October at 70 x 70 cm spacing and 50-60-100 kg NPK/ha.

□ For the first time, insecticide resistance in coccinellid predatory beetle *Chelomenus sexmaculate* was observed in the Cotton ecosystem at Rajahmundry and CTRI Research Station, Guntur. Maximum resistance frequencies observed were 68% to Endosulfan and 44% to cypermethrin in the larval population of the beetle.

At CTRI Research Station, Kandukur, Bordeaux mixture/ COC drench as and when required up to 30 days after germination (DAG) + Ridomil 0.2% spray at 30 and 40 DAG controlled damping off and black shank diseases effectively in nursery.

NATIONAL SCIENCE DAY CELEBRATIONS

The "National Science Day" was celebrated at CTRI, Rajahmundry on 28th February 2004 with the aim, **Encouraging** scientific awareness in the community. CTRI observed 'Open Day' to the public. About 250 students from various colleges and schools visited different laboratories in the Institute. A meeting was organized with all the students with Dr. N.C. Gopalachari, Former Director, CTRI as the chief guest. Following leaflets were released on the occasion.

- 1. Nature's fertilizer factories (in English & Telugu)
- 2. Role of bio-technology in modern
- agriculture
- 3. Biological control: Punching pests naturally

QUINQUENNIAL REVIEW TEAM (QRT) VISIT

The Chairman and Members of the QRT team visited CTRI and its Research Stations and All India Network Research Project on Tobacco (AINRPT) Centres on the following dates and reviewed the research activities for the period 1998-2002.

AINRPT Centre, Anand	: 5–7 th Jan., 2004
CTRI RS, Jeelugumilli	: 20 th Jan, 2004
CTRI Research Station, Kandukur	: 21 st Jan., 2004
CTRI Research Station, Guntur	: 22 nd Jan., 2004
AINRPT Centre, Nandyal	: 23 rd Jan., 2004
CTRI, Rajahmundry and	: 1–5 th Mar., 2004
KVK, Kalavacherla	



QRT visit to CTRI RS, Jeelugumilli

TRANSFER OF TECHNOLOGY

RADIO TALKS

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- చలికాలంలో పాడి పశువుల యాజమాన్యం. (Management of milch animals in winter) by Dr. P.V.V.S. Siva Rao on AIR, Visakhapatnam on 27.1.2004.
- లంక, నాటు పొగాకు సాగులో ఎరువుల యాజమాన్యం. by Dr. V. Krishnamurthy on AIR, Visakhapatnam on 28.1.2004.
- పాషకలోప వ్యాధుల నివారణలో పండ్ల పాత్ర. (Role of fruits in prevention of nutritional deficiencies) by Smt. N. Aruna Kumari on AIR, Visakhapatnam on 5.2.2004.
- పాగాకు నాశించే తెగుక్ళు. by Dr. C.A. Raju on AIR, Visakhapatnam on 28.2.2004.
- అరటి వ్యర్థాల ద్వారా అదనపు ఆదాయం. (More returns from banana waste) by Sri R. Sudhakar on AIR, Visakhapatnam on 10.3.2004.
- అరటి సాగులో మెళకువలు. (Tips in banana cultivation) by Sri E.
 Vijaya Prasad on AIR, Visakhapatnam on 28.3.2004.
- పాగాకు నాశించే కాండం తొలుచు పురుగు.
 By Dr. P. Venkateswarlu on AIR,
 Visakhapatnam on 31.3.2004.

CONFERENCES/ SYMPOSIA/ TRAININGS/ WORKSHOPS

- Dr. V. Krishnamurthy, Principal Scientist and Head, Division of Crop Chemistry & Soil Science and Dr. D.V. Subhashini. Sr. Scientist attended 91st Session of Indian Science Congress held at Punjab University, Chandigarh during 3 - 7 January, 2004 and Dr. Krishnamurthy presented a paper on 'Decision support system for irrigation water evaluation quality and suitability for growing FCV tobacco.'
- Dr. D.V. Subhashini, Sr. Scientist attended winter school on 'Recent trends in characterization of plant growth

promoting rhizobacterium (PGPR)' during 8 – 17 January, 2004 at Allahabad Agri. Institute, Allahabad.

- Sri R. Sudhakar, Technical Officer, KVK, attended National workshop on 'Value addition, commercialization and marketing, in selected nontimber forest produce for income generation' during 21– 23 January 2004 at Rajahmundry.
- Sri G. Satyanarayana, Technical Officer attended 'Horticulture Expo-2004' during 26–28 January, 2004 at Hyderabad.
- Dr. V. Krishnamurthy, Principal Scientist and Head, Division of Crop Chemistry & Soil Science, Dr. U. Sreedhar, Sr. Scientist and Dr. S. Kasturi Krishna. Scientist (Sr. Scale) attended the National Seminar on "Resource management for sustainable agriculture" orga-Union, at Agricultural College, Bapatla during 28 - 30 January, 2004 and Dr. V. Krishnamurthy presented a paper on 'Dry matter yield and NPK uptake in flue-cured tobacco crop as affected by different K - levels under KLS conditions'.
- Sri S. Sitaramaiah, Principal Scientist and OIC, KVK and Dr. (Mrs.) K. Suman Kalyani, Scientist and Training Organizer, attended NABARD Workshop on 2nd February 2004 at Rajahmundry.
- Dr. K. Deo Singh, Director, CTRI and Dr. C.V. Narasimha Rao, Principal Scientist attended a meeting on 'Food safety and certification' under the Chairmanship of the Director-General, ICAR at New Delhi on 5th February, 2004.
- Dr. Satyajit Roy, Sr. Scientist and Head, CTRI Research

Station, Dinhata participated in the National Symposium on "Current perspectives in stress biology" organized by Department of Botany, University of North Bengal, Siliguri during 6 – 8 February, 2004 and presented a paper entitled 'Symptomatology and cultural management of hollow stalk disease of Motihari tobacco in North Bengal.'

- Sri R. Sudhakar, Technical Officer, KVK attended a seminar on 'Responding to changes and challenges – New roles of Agric. Extension' held during 7 - 9 February, 2004 at Nagpur.
- Sri N. Syam Prasad, Technical Officer participated in International Convention on 'Automation of libraries in Education & Research Institutions' during 11 – 13 February, 2004 at Jammiamillia Islamia, New Delhi.
- nized by Andhra Agricultural Union, at Agricultural College, Bapatla during 28 – 30 January, 2004 and Dr. V. Krishnamurthy presented a paper on 'Dry matter yield and NPK uptake in flue-cured tobacco crop as affected by different K – levels under KLS conditions'. Dr. M.M. Shenoi, Principal Scientist and Head, CTRI Research Station, Hunsur participated in IPS National Symposium on 'Crop surveillance : Disease forecasting and management' during 19 – 21 February, 2004 at IARI, New Delhi.
 - Sri R. Sudhakar, Technical Officer and Smt. N. Aruna Kumari, Technical Officer of KVK, participated in 'Krishi vigyan mela' during 26 – 27 February, 2004 at IARI, New Delhi.
 - Dr. K. Deo Singh, Director, CTRI visited CPCRI, Kasargod on 27.2.04 and held discussions with the Director, scientific, technical and administrative staff in connection with modernization of laboratory.
 - Dr. M.M. Shenoi, Principal Scientist and Head, CTRI Research Station, Hunsur and

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Dr. U. Sreedhar, Sr. Scientist participated in 'Input Committee meeting of Tobacco Board' on 3rd March 2004 at Tobacco Board, Bangalore.

- Dr. K. Deo Singh, Director, CTRI and Dr.C.V. Narasimha Rao, Principal Scientist attended the meeting of 'Working Group on consumer health and safety concerning tobacco and tobacco products' at Bureau of Indian Standards, New Delhi on 8th March, 2004.
- Dr. K. Deo Singh, Director, CTRI and Dr. T.G.K. Murthy, Sr. Scientist attended National Conference on 'Transgenics in Indian Agriculture' organized by ICAR and Indian Society of Plant Genetic Resources, NBPGR, New Delhi during 9 – 10 March, 2004.
- Dr. P.V. Venugopala Rao, Sr. Scientist attended National Symposium on "Harnessing heterosis in crop plants" at IIVR Campus, Varanasi during 13 – 15 March, 2004.
- Dr. K. Deo Singh, Director, CTRI attended the National Conference on 'Organic farming for sustainable production' at NASC Complex, New Delhi during 23 – 24 March, 2004.
- Dr. R.V.S. Rao, Principal Scientist attended National Conference on "Seed : A global perspective" in New Delhi during 26 – 28 March, 2003.

PAPERS PUBLISHED

- Deo Singh, K. Tobacco -Changing scenario. The Hindu Survey of Indian Agriculture, 2004, p. 88-9.
- Deo Singh, K. Orobanche parasitism on parthenium observed under North Bihar conditions. Sci. and Cult. 69(11-12): 431, 2003.

- Ravisankar, H. and T.G.K. Murthy. Nicotiana species information system (NSIS). ARIS News 6(1) : 1- 2, Jan.-June, 2003.
- Sreedhar, U., C.V. Narasimha Rao and S. Sitaramaiah. How to overcome the pesticide residue problem in tobacco? (in Telugu). Eenadu, 10th January.

IN-HOUSE SEMINAR

Dr. K. Deo Singh, Director, CTRI gave a talk on 'Organic farming' consequent to his participation in National Conference on 'Organic farming for sustainable production' at NASC Complex, New Delhi during 23 - 24 March 2004.

TRAINING PROGRAMMES

- Training was imparted to Mr. B.M. Ravi Kiran, from M/s. Godfrey Philips (India) Limited, Guntur for a period of eight days on 'Tobacco Production Technology' at CTRI, Rajahmundry from 16.2.04 to 23.2.2004.
- One day training on 'Curing and grading' was organized to the field staff and tobacco farmers of Thorredu auction floor of Northern Black Soils on 8.3.04.

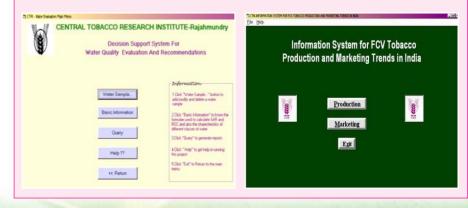
SOFTWARES DEVELOPED AT ARIS CELL, CTRI, RAJAHMUNDRY

1. Information system for FCV tobacco production and marketing trends in India

This software will be useful to retrieve the information state-wise, zone-wise, platform-wise, grade-wise either in tabular form or pictorial form. Different reports based on production and marketing of tobacco can be generated graphically. It has the unique feature of retrieving data on selected parameters like quantity sold, average price, maximum price, minimum price etc. The retrieved information will give trends in marketing and production of FCV tobacco in a particular year or over a period of time.

2. Decision support system for water quality evaluation in FCV tobacco – growing zones of India

A software system was developed using visual Basic and Oracle to store and retrieve the information on irrigation water, which acts as a decision tool to classify the type of water from the stored database. Using this, farmers, research workers, extension staff and Tobacco Board field officers can easily identify the source and quality of water for irrigating FCV tobacco and other crops.



PUBLICATIONS

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CTRI Research Station, Hunsur published a leaflet on 'Tray nursery technology of raising seedlings in polystyrene trays' in Kannada for distribution to farmers.

AWARDS AND RECOGNITIONS

□ Sri S. Ramakrishnan, Scientist (Nematology) was awarded the degree of Doctor of Philosphy in 'Plant Nematology' by Tamil Nadu Agricultural University, Coimbatore for the thesis entitled 'Studies on the management of root knot nematode, *ëMeloidogyne arneria* in groundnut'.

INTER INSTITUTIONAL TRANSFERS

- Sri G.R. Desh Bandu, Sr. Administrative Officer, CTRI, Rajahmundry was promoted to the post of Deputy Secretary (Technical Services & Cash) at ICAR, New Delhi.
- Sri M. Appa Rao, Technical Officer, T6, CTRI Rajahmundry was relieved to take up new assignment on deputation to Directorate of Cashew nut and Cocoa Development, Cochin as Dy. Director (Marketing).

KRISHI VIGYAN KENDRA

Krishi Vigyan Kendra conducted 47 training programmes in Agriculture and allied aspects. A total of 1,857 farmers, farm women, rural youth and extension functionaries were trained. Eight long duration training programmes and eight short duration training programmes on different topics were conducted for extension functionaries and others. Five news items were covered in regional language news papers such as Eenadu and Vartha and five TV shows were telecast through ETV, Teja TV, ABC Channel and Siti Cable Channel. KVK conducted nine training programmes sponsored by other agencies viz. ICDS, Korukonda, UNDP, Coir Board, FTC, Samalkot, ANTWA, Cuddapah, IGMRI, Hyderabad etc. on different disciplines for the benefit of villagers.

International Women's Day

KVK organized 'International Women's Day' on 8.3.2004 in their farm at Kalavacherla. A total of 50 rural women participated in the programmes. They were explained about the development activities. 'Women entrepreneurship development camp' was organized to make women self-sufficient for improvement of their living standards.

Exhibition

KVK put up a stall in the exhibition arranged in connection with the visit of Sri Rajnath Singh, Union Minister for Agriculture at Agricultural Research Station, Maruteru on 3.1.2004. Nearly 500 farmers, 200 farm women visited the stall and purchased KVK products made by beneficiaries.



Rural artisans, fabricating the grain storage bins at KVK.



QRT Members visit at KVK

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