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Newsletter

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NATIONAL CONFERENCE ON TOBACCO - 2005

Indian Society of Tobacco Science (ISTS) organized the National Conference on Tobacco-2005 during 3-7 October, 2005 with the theme "Scientific Strategies for Sustainable Growth of Farm Economy and Export" at the Acharya N.G. Ranga Agricultural University Auditorium, Rajendranagar, Hyderabad, India in association with the Tobacco Board, Guntur and The Indian Tobacco Association, Guntur. A tobacco trade exhibition was also arranged during the conference.

The inaugural function was held on 4th October, 2005 in the ANGRAU Auditorium. Sri Laljan Bhasha, Hon'ble Member of Lok Sabha and Member, Tobacco Board, Dr. P. Raghuvardhan Reddy, Vice-Chancellor, Acharya N.G. Ranga Agricultural University, Dr. M.V. Rao, Retd. Spl. DG, ICAR and Former Vice-Chancellor, Acharya N.G. Ranga Agricultural University, Dr. J. Suresh Babu, IAS, Executive Director, Tobacco Board, Dr. K.C. Jain, Asst. Director General (Commercial Crops), Indian Council of Agricultural Research, Dr. Y. Sivaji, Former Member of Parliament, Sri Ch. Narendranath, President, The Indian Tobacco Association, Sri M.M. Yusuff, Vice-President, ISTS and Sr. Vice-President, GPI and Sri P. Chengal Reddy, President, AP Farmers' Forum were the Guests of Honour. Sri S. Janardhan Reddy, Co-President, ISTS and the Chief Executive, ITC Ltd. - ILTD Division gave the welcome address. Dr. K. Deo Singh, President, ISTS and Director, CTRI, Rajahmundry introduced the theme of the Conference. Dr. Suresh Babu

delivered the keynote address on behalf of Dr. P. Dayachari, IAS, Chairman, Tobacco Board. Sri Laljan Bhasha, Dr. Jain, Dr. Sivaji and Sri Chengal Reddy addressed the gathering. Dr. V. Krishnamurthy, Secretary, ISTS proposed the vote of thanks.

Invited lectures were delivered by the distinguished speakers on different topics under the two broad areas (i) Indian Tobacco Situation vis-a-vis Global Scenario and (ii) Scientific Strategies for Sustainable Tobacco Production and Product Development

Fellow of Indian Society of Tobacco Science (FISTS) was conferred on the following members of the Society for their outstanding contributions to the tobacco research.

1. Dr. C.V. Narasimha Rao
2. Dr. K. Palanichamy
3. Dr. B.N. Bhat
4. R. Subba Rao
5. M. Sanni Babu
6. Dr. U. Sreedhar
7. Dr. M. Mani

ISTS Award for outstanding research contributions during the triennium 2002-05 received by Drs. M. Anuradha, K. Nageswara Rao, K. Siva Raju, K. Deo Singh, V. Krishnamurthy and Sri D. Prabhakara Babu for the paper entitled "Influence of deficiency and toxicity of essential plant nutrients on some physiological and biochemical changes in flue-

cured tobacco (*Nicotiana tabacum* L.).

- Tobacco Board Award was received by Messers A.I. Narayanan, K. Deo Singh, K. Sarala, R.V.S. Rao and P.V. Venugopala Rao for the paper entitled "Cy 135: A promising FCV tobacco line for rainfed vertisols of Andhra Pradesh"

A total of 146 presentations by scientists covering different facets of tobacco research were arranged in the respective poster sessions.



Dr. K.C. Jain addressing the gathering



Dr. V. Krishnamurthy receiving ISTS Award from Dr. Raghuvardhan Reddy

RESEARCH ADVISORY COMMITTEE MEETING

The Research Advisory Committee of CTRI met on 26th December, 2005 at CTRI, Rajahmundry under the Chairmanship of Padmasri Dr. M. Mahadevappa, former Vice-Chancellor, UAS, Dharwad and former Chairman, ASRB, New Delhi, Dr. K. Deo Singh, Director, CTRI, Dr. B. Rosaiah, Associate Director of Research, RARS, ANGRAU, Anakapalle, Dr.S. Kulkarni Prof. & Head, Pathology, UAS, Dharwad, Dr. R. Lakshminarayana, Retd. Principal Scientist, CTRI, Sri I. Kurma Rao and Sri T. Ramasiva Gupta, Members of IMC, Heads of the Divisions, Research Stations and Scientists of CTRI have attended the meeting. Dr. Mahadevappa felt happy about the hybrid tobacco projects being conducted in different agro-climatic zones and with the report of 100% hybrid vigour at CTRI Research Station, Kandukur. Dr. Singh made a brief presentation of researchable issues in Indian tobacco. He informed that 2005 CORESTA group meeting identified novel clipping system for seedlings



Members of RAC : Dr.M.Mahadevappa, Dr.R. Lakshminarayana, Dr.B.Rosaiah, Dr.S.Kulakarni, Dr.K.Deo Singh and Dr. C.V.N. Rao

to check pest & disease incidence with vigorous growth. He also mentioned about identification of new areas for production of flavourful tobacco and development of hybrids with lower levels of TSNA. The Chairman and Members of RAC made recommendations for progress of research in different disciplines.

RESEARCH HIGHLIGHTS

- ❑ Motihari tobacco with recommended dose of fertilizers and garlic as intercrop (one row) in every row with 50% additional N for intercrop was more productive and remunerative (net return Rs.32762/ha) under North Bengal conditions.
- ❑ The intercropping system viz., chewing tobacco + Ballary onion increased the net returns (Rs.68859/ha), B:C ratio (2.53) and additional returns (Rs.24527/ha) when compared to the sole chewing tobacco crop in Tamil Nadu.
- ❑ Promising advanced breeding lines, 147 M x 1-21 (interspecific cross derivative) with 43% increase in cured leaf, Cy 163 and Cy156 with about 15 % increase in cured leaf and CY 135 and Cy 139 with 25% increase in cured leaf were significantly superior to VT1158.
- ❑ The hybrid Banket A1 x 324C was identified to be the most promising hybrid with 1865 kg/ha cured leaf, an increase of 21% over 324C and 29% over Banket A1. BRK1 x Banket A1 and Va 510 x Banket A1 were the other promising hybrids.
- ❑ Application of N:K in 1:1.5 ratio i.e. 177.5 kg K_2O /ha in three splits in 1:2:1 ratio along with 115 kg N and 60 kg P_2O_5 /ha recorded significantly higher cured leaf yield and grade index in northern light soils of Andhra Pradesh.
- ❑ In chewing tobacco based cropping system in Tamil Nadu, maize followed by chewing tobacco increased the gross returns, net returns and B:C ratio. This was followed by Sunflower - Tobacco - Maize.
- ❑ Effect of planting dates in three different varieties at three locations revealed that late planting favoured the stem borer infestation. Highest infestation of 43.86% was recorded in VT-1158 (27-11-2004) followed by 31.90 and 27.20% in NLS-4 (28-10-2004) and Banket A1 (08-09-2004), respectively.
- ❑ In traditional black soils, three promising F_1 hybrids viz. V 4398(Cy-135 x VT 1158) and V 4304 (N 98 x VT 1158) V 4306 (KST 28 x VT 1158) with about 25 % standard heterosis over VT
- 1158 in terms of cured and bright leaf yield and grade index and acceptable chemical quality were identified. CMS hybrids i) AP-8 x Cy 142 with 25% standard heterosis in cured leaf and 21 % grade index and ii) 6-6 MS x Cy 142 with 32, 39, 31 % standard heterosis for cured leaf, bright leaf and grade index, respectively with good leaf chemistry were identified.
- ❑ Among the flavourful lines tested, Coker 319 which was significantly superior to Kanchan in 2003-04 was on par in this season with cured leaf yield of 2942 kg/ha. Higher carbonyl content of 749 mg/100g was recorded by Coker 319 as compared to 512 mg/100 g in NLS-4 (bulk crop).
- ❑ At CTRI Research Station, Vendasandur, nearly two fold increase in solanesol content was observed in the variety, Abirami after smoke curing.
- ❑ TSNA levels in all the chewing varieties were relatively low and less than the permissible level of 10 ppm except variety Bhagyalakshmi, 12.53 ppm after smoke curing.

TRANSFER OF TECHNOLOGY

CONFERENCES/ TRAININGS/ WORKSHOPS

- ❑ Dr. C. A. Raju, Head Div. of Crop Protection attended training programme on "Antagonists for plant disease control" at PDBC, Bangalore from 26 Sept., to 1st Oct., 2005.
- ❑ Dr. V. Krishnamurthy, Head, Div. of CC & SS, Dr. P.R.S. Reddy, Pr. Scientist and Dr. C. Chandrasekhara Rao, Sr. Scientist attended Seventieth Annual Convention: 2005 of the Indian Society of Soil Science held at TNAU, Coimbatore from 28 Sept., to 1st Oct., 2005.
- ❑ Dr. (Smt.) D.V. Subhashini, Sr. Scientist attended National Symposium on "Microbial Technology for Productive Agriculture" at TNAU, Coimbatore from 7-8th October 2005.
- ❑ Dr. U. Sreedhar, Sr. Scientist attended 6th National Symposium on "Sustainable plant protection strategies: Health and environmental concerns" at Dapoli from 15-17th Oct., 2005.
- ❑ Dr. R.L. Arya, Sr. Scientist attended 4th International Food Legumes Research Conference, at New Delhi from 18-22nd Oct., 2005.
- ❑ Dr. P.R.S. Reddy, Pr. Scientist attended Working Group III - Relating to integration of basic, strategic and applied research in AICRPs at NBPGR, New Delhi from 20th Oct., 2005.
- ❑ Sri R. Srinivasulu, Pr. Scientist attended National Symposium on "Efficient Water Management for eco-friendly, sustainable and profitable agriculture" at WTC, New Delhi from 25-27th October, 2005.
- ❑ Sri R. Sudhakar and Smt. N. Aruna Kumari, Technical Officers of KVK attended National Seminar on "Gender mainstreaming in agricultural research extension training: Problems and Perspectives in micro-enterprises development in Rural India" at New Delhi from 25 - 27th October, 2005.
- ❑ Dr. M. Mahadevaswamy, Sr. Scientist attended National Seminar on "Composting and Vermicomposting" at CSR&TI, Mysore from 26-27 Oct., 2005.
- ❑ Dr. K. Sivaraju, Sr. Scientist attended International Conference on "Plant Genomics and Biotechnology: Challenges & Opportunities" at Raipur from 26-28 Oct., 2005.
- ❑ Dr. (Mrs.) K. Sarala, Sr. Scientist attended Orientation course on Bio-safety considerations for evaluation of transgenic crops at NBPGR, New Delhi from 7-14th Nov., 2005.
- ❑ Dr. T.G.K. Murthy, Sr. Scientist and Dr. R.V. S. Rao, Head, Div. of Crop Improvement attended Workshop of FAO sponsored project on "Establishment of National Information Sharing Mechanism on the Implementation and Monitoring of the Global Plan of Action (GPA)" at NBPGR, Hyderabad from 9-10th Nov., 2005.
- ❑ Dr. J.V. Prasad, Sr. Scientist attended conference on "Biopesticides: Emerging trends Bet 2005" at Palampur from 11-13 Nov., 2005
- ❑ Dr. K. Deo Singh, Director, CTRI and Dr. V. Krishnamurthy, Head, Div. of CC & SS attended International Conference on "Plasticulture & Precision farming" at New Delhi from 17-21st Nov., 2005.
- ❑ Dr. M. M. Sheno, Head, CTRI RS, Hunsur attended Training programme on "Strategies for stress management" at NAARM, Hyderabad from 17-23rd Nov., 2005
- ❑ Dr. (Smt.) M. Anuradha, Sr. Scientist attended National Seminar on "Plant Physiology - Crop Productivity and Quality Improvement through physiological interventions" from 23-25th Nov., 2005 at Navasari Agril. University, Navasari.
- ❑ Sri S. Jitendranath, Technical Officer, KVK attended Training Programme on "Medicinal and Aromatic Crops - Agri-business opportunities" to be held at Hyderabad from 28-30th Nov. 2005.
- ❑ Sri M. Sanni Babu, Pr. Scientist attended National Symposium on "Efficient Water Management for Eco-friendly, Sustainable and Profitable Agriculture" at IARI, New Delhi from 1-3rd Dec. 2005.
- ❑ Dr. T.G.K. Murthy, Sr. Scientist attended training programme on "WTO and its implication on agriculture" at MANAGE, Hyderabad from 2-9th Dec., 2005.
- ❑ Dr. P. V. Venugopala Rao, Sr. Scientist attended National Symposium on "Trends in Plant Science Research" at Visakhapatnam from 8-10th Dec., 2005
- ❑ Sri R. Sudhakar, Technical Officer, KVK attended National Seminar on "Green to Evergreen challenges to extension education" at IARI, New Delhi from 15-17th Dec., 2005
- ❑ Dr. U. Sreedhar, Sr. Scientist attended First Congress on Insect Science at PAU,

Ludhiana from 15-17th Dec., 2005.

- Dr. J.V. Prasad, Sr. Scientist and Dr. C. Chandrasekhara Rao, Sr. Scientist attended 8th National Seminar on "Strategies for improved farming and ecological security of Coastal Region" held at CTCRI, Trivendrum, Kerala from 21-24th Dec. 2005.
- Dr. M. Kumaresan, Sr. Scientist (Agronomy) attended the XX ICAR Regional Committee meeting No.VIII at Chennai on 23 - 24th December, 2005.

RADIO TALKS

- కిశోర బాలికలకు పోషకాహారము 'Nutritional requirement for adolescent girls' by Smt. V.V. Lakshmi Kumari on All India Radio, Visakhapatnam on 27.10.2005.
- స్త్రీలకు స్వయం ఉపాధి కార్యక్రమాలు 'Self employment programmes for Women' by Sri R. Sudhakar on All India Radio, Vijayawada on 14.11.2005.
- పోషకాహార ప్రాముఖ్యత 'Importance of nutritional diet' by Smt. N. Aruna Kumari on All India Radio, Vijayawada on 21.11.2005.
- లాభసాటి విస్తరాకుల తయారీ 'Profitable adda leaf plate making' by Sri R. Sudhakar on All India Radio, Visakhapatnam on 24.11.2005.
- పెరటి తోటల పెంపకం 'Raising Kitchen garden' by Sri E. Vijaya Prasad on All India Radio, Visakhapatnam on 15.12.2005.
- కె.వి.కె. ద్వారా స్త్రీలకు సాధికారత కార్యక్రమములు 'Women empowerment programmes' through KVK by Dr. Y. Subbaiah, All India Radio, Visakhapatnam on 29.12.2005.

BOOKS/ BULLETINS PUBLISHED

1. **Indian Burley Tobacco** - Its Production and Quality for Export. Krishnamurthy, V., R. Subba Rao and K. Deo Singh. 2005. 69p. CTRI, Rajahmundry. (Rs. 200/-)

2. Tobacco Plant Nutrition.

Anuradha, M., K. Nageswara Rao, K. Deo Singh and V. Krishnamurthy. 2005. 31p. CTRI, Rajahmundry. (Rs. 210/-)

3. Non-FCV Tobacco Soils of India

- Their Fertility and Management. Krishnamurthy, V. and K. Deo Singh. 2005. 96p. CTRI, Rajahmundry. (Rs.400/-)

4. Alternative Uses of Tobacco.

Deo Singh, K. and K.C. Jain. 2005. 136p. CTRI, Rajahmundry. (Rs.600/-)

5. Modern techniques of tobacco production.

Prasad Rao, J.A.V. (ed.), 2005. 93p. CTRI, Rajahmundry. (Rs.175/-)

6. Division of Crop Chemistry and Soil Science: A Profile.

Krishnamurthy, V., C.V. Narasimha Rao and M. Anuradha. July, 2005, 16p. CTRI, Rajahmundry.

7. Division of Crop Production.

Harishu Kumar, P., T. Krishnamurthy and G. Adhinaryana. December, 2005. 24p. CTRI, Rajahmundry.

HUMAN RESOURCE DEVELOPMENT



Mr.K.T.R.Singh, Stenographer Gr.III at Director Personal Section has passed M.Sc. (Bioinformatics) in First Division from Annamalai University, Tamil Nadu in December, 2005.

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APPOINTMENTS

Sri A.V. Gopalakrishnamurthy was appointed as the Asst. Administrative Officer in CTRI, with effect from 2.11.2005.

INTER-INSTITUTIONAL TRANSFERS

Sri K. Venkateswara Rao, S.S. Gr.II has been transferred from Sugarcane Breeding Institute, Coimbatore to CTRI, Rajahmundry and joined on 19.12.2005.

RETIREMENTS

- Dr. S. R. Prabhu, Pr. Scientist, CTRI, Rajahmundry retired on superannuation on 31.10.2005
- Sri D. Ramakrishna Rao, S.S.Gr.III, CTRI, Rajahmundry retired on superannuation on 30.11.2005
- Sri Tarini Barman, S.S. Gr.I, CTRI Research Station, Dinhata retired on superannuation on 30.11.2005.
- Sri G. J. Ratnakumar, Assistant, CTRI, Rajahmundry voluntarily retired on 1.12.2005.
- Sri P. Satyanarayana, S.S.Gr.III CTRI, Rajahmundry retired on superannuation on 31.12.2005.
- Sri Lanka Nagaiah, S.S. Gr.I, KVK retired on superannuation on 31.12.2005.
- Sri B. De, Technical Officer, T-5, CTRI Research Station, Dinhata retired on superannuation on 31.12.2005.

OBITUARY

- Sri P.V.S. Subrahmanyam, Asst. Admn. Officer, CTRI, Rajahmundry on 7.12.2005.
- Sri B. Maheswara Rao, S.S. Gr.I, CTRI, Rajahmundry on 21.12.2005.

VISITORS

A five member team from Leaf Technology Consultancy, UK visited CTRI on 10.11.2005 and interacted with scientists of CTRI on different subjects.



Dr. Mike McEwan and Dr. Malianna Gala Visiting Smoke Research Lab