



# समाचार Newsletter

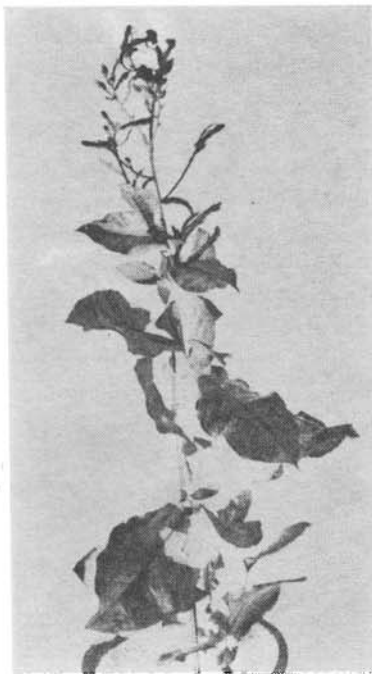
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CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY

## RESEARCH HIGHLIGHTS

### CTRI, RAJAHMUNDRY

- The pink aphids *Myzus nicotianae* Blackman appeared in an epidemic form on FCV tobacco during 1990-91 for the first time. These aphids were reported to be resistant to organophosphorous insecticides. The loss in cured leaf yield due to this species of aphids was estimated to a tune of 430 kg/ha during the epidemic year.
- Fertility could be restored in the interspecific hybrid *N. amplexicaulis* x *N. tabacum* on treatment with 0.5% colchicine for 3 days at 8 h/day. The hybrid was rescued with a view to transfer root-knot nematode re-



Ampliploid *N. amplexicaulis* - *tabacum*

sistance from the wild species to *N. tabacum*. The amphiploid *N. amplexicaulis tabacum* was back crossed with Jayasri and Bhavya as pollen parents and the BC<sub>1</sub> progeny will be screened in nematode sick plots.

- Foliar application of Ridomil MZ 72 WP at 0.2% and 0.1% 20 and 30 DAG was found to be the most effective for the control of damping-off in tobacco nursery.

- Maximum inhibition of *Pythium aphanidermatum* resulted from the culture filtrate of

the toxigenic isolate of *Trichoderma* spp. grown at 6.0 pH.

- The pipe line varieties of FCV tobacco V-3189 and L-1158 recorded more cured leaf yields by 37% and 24% respectively over control variety Hema. Aphid and *Heliothis* infestation in V-3189 was relatively low in comparison to the other cultivar Hema.

- Studies on the incidence on natural enemies on *Heliothis armigera* in *N. rustica* trap crop around FCV tobacco revealed that the percentage parasitisation on the pest by *Camponotus chloridae*, *Chelonus formosanus* and *Apanteles africanus* ranged from 2-10%, 5-14% and 7-30% respectively. Similarly population of predatory insects on *H. armigera* in *N. rustica* trap crop ranged from 2-22 nos (for 20 plants). *Coccinellid* larvae and adults were more predominant among predators.

### CTRI RESEARCH STATION, VEDASANDUR

- Caterpillar *Spodoptera litura* resistant selection HV. 84-5-3/1 recorded cured leaf yield of 3,722 kg/ha which is 15.1% more compared to the yield 3,235 kg/ha of susceptible parent Thangam.

- Among the Cigar varieties bred for Vedaranyam tract, selections F 6-1-7, F 6-1-11, F 6-1-17 and F 6-1-19 of VR-2 x Bhagyalakshmi cross exhibited superiority over control VR-2 with an increased cured leaf of 44.8, 40.9, 63.0 and 61.0% respectively. Selection F 6-6-3-6 of VR-2 x Beinhart cross also registered an increase in total leaf yield by 42.7% over control VR-2.

- In tobacco based cropping system, chewing tobacco following kharif ragi yielded better (3.91 t/ha) over fallow-tobacco (3.83 t/ha). Sequential system component crops viz., sesamum., soybean and ragi gave per hectare yields of 376 kg, 831 kg, 1387 kg and 680 kg respectively.

- Application of NSC alone 37.5 t/ha produced more number of transplantables as compared to 25 t/ha NSC + 20 kg N/ha.

## TRANSFER OF TECHNOLOGY

### CTRI, RAJAHMUNDRY

• Dr. M.S. Chari, Director along with Heads of Divisions and Sr. Scientists attended a Farmer's group discussion held at auction floors of Rangampeta and Torredu on 27th and 29th April, respectively.

### CTRI RESEARCH STATION, HUNSUR

• Under the development scheme for production and supply of seed and seedlings, nursery was raised in an area of 2400 m<sup>2</sup> and 19.81 lakhs seedlings were supplied to needy farmers.

• Training programmes in nursery management, planting and cultural practices were conducted for field officers and field assistants of Tobacco Board during May and June, 1991.

### CTRI RESEARCH STATION, PUSA

• A meeting on "Tobacco Marketing Problems in Bihar" was organised jointly by CTRI Research Station, Pusa and Bihar State Tobacco Growers Co-operative Federation, Patna at CTRI Research Station, Pusa on 13-6-91. Md. Shakeel Ahmed, I.A.S. Secretary, Co-operation, Government of Bihar and Chairman, Bihar State Tobacco Federation, Patna, Sri Shankar Tiwari, Administrator, Bihar Tobacco Federation, Patna, Dr. G. Trivedi, Director Extension Education, R.A.U, Pusa and Scientists of CTRI Research Station participated in the meeting. Farmers and traders expressed their views on tobacco cultivation, marketing problems and other measures to be adopted for improvement of tobacco in Bihar. Transfer of Technology was also discussed at length by the Scientists of CTRI.

### RADIO TALKS

1. పెరటి తోటల పెంపకంలో మెళుకువలు (Management of kitchen gardening) by Mrs. V.V. Lakshmikumari, on AIR, Visakhapatnam, 10-4-91.
2. వర్షానియా పొగాకు భూములలో వేసవి దుక్కుల అవశ్యకత (Importance of deep tillage in tobacco soils in summer) by Sri S.K. Naidu, on Air, Visakhapatnam, 12-4-91.
3. Tobacco diseases and their control measures by Sri A. James, on AIR, Madurai, 27-4-91.
4. నల్లరేగడి వర్షానియా భూములలో ఖరీఫ్లో వేయదగు పంటలు (Suitable kharif crops for black soils in rotation with FCV tobacco) by Dr. P. Harishu Kumar, on AIR, Vijayawada, 9-5-91.
5. 'Care of paddy nursery' by Dr. S.N. Tripathi, on AIR, Darbhanga, 15-6-91.
6. అరటి, గోగు, కిత్త, వారలతో అలంకార వస్తువులు (Hand crafts

through banana, mesta and aloe fibre) by Sri R. Sudhakar, on AIR, Visakhapatnam, 19-6-91.

7. "Disease and pest resistant tobacco varieties" by Dr. K. Palanichamy, on AIR, Madurai, 25-6-91.

### CONFERENCES/SYMPOSIA/SEMINARS/WORKSHOPS/TRAINING COURSES

• Dr. C. Kamamma, Gandhigram Rural University gave a seminar on 'Nutrition management and health aspects for growing children' at CTRI Research Station, Vedasandur on 11-4-91.

• Mrs. C. Arunakumari participated in training programme on 'Recent advances in Home Science and appropriate agricultural technologies', at Sri Avinash Lingam Deemed University, Coimbatore from 11-4-91 to 4-5-91.

• Sri U. Sridhar, Scientist participated in the Summer Institute on 'Host plant resistance to insects and its application in insect pest management' organised by Tamilnadu G.D. Naidu Agricultural University, Coimbatore, from 5th to 25th June, '91.

• Sri Y.V. Suryanarayana, Documentation Officer, participated in the Workshop on 'Productivity and Impact of Research: Scientometric/bibliometric measures and influencing factors', organised by National Academy of Agricultural Research Management (NAARM), Hyderabad, from 25th to 29th June, 1991.

• Dr. C.A. Raju, Scientist (SG) attended national Symposium on 'Biological control in plantation crops' held at Rubber Research Institute of India, Kottayam from 27th to 28th June, '91 and presented a paper entitled "Survey of antagonism in *Trichoderma* species against *Pythium aphanidermatum*."

### INVITED LECTURE

Sri S. Sitaramaiah, Scientist (SG) gave an invited lecture to fumigation personnel of Quality and Development Centre, Export Inspection Agency, Madras on 'Usage of chemicals for fumigation with special reference to tobacco safety measures and antidotes' at Kakinada on 6-5-91.

### Ph.D AWARD



Sri T. Sitaramachary Scientist (SG) was awarded Doctorate degree for his thesis "Genetic analysis on certain agronomic characters in White Burley Tobacco (*N. Tabacum L*)" from Andhra University Waltair. **Congratulations.**

## VISITORS

### CTRI, RAJAHMUNDRY

- 21.5.91. Dr. B.De. Silva, General Manager, Fertiliser and Seed, M/s Ceylon Tobacco Co., Sri Lanka.  
14.6.91. Dr. G. C. Srivatsava, IAS, Secretary ICAR and Jt. Secretary to DARE.

### CTRI RESEARCH STATION, PUSA

- 13.6.91. Md. Shakeel Ahmed, IAS Secretary Co-operation, Govt. of Bihar and Sri Jai Shankar Tiwari, Administrator, Bihar Tobacco Growers Co-operative Federation and Managing Director, Bihar State Ware Housing Corporation, Patna.

### CTRI RESEARCH STATION, HUNSUR

- 12.4.91. Sri Ramakantha Reddy, Chairman, Tobacco Board. Guntur Sri P. B. Rama Murthy, Dy. Secretary and Managing Director, Karnataka State Ware Housing Corporation, Bangalore.

## PAPERS PUBLISHED

1. CHARI, M.S; N. KRISHNANANDA and R.S.N.RAO *Heliothis armigera* a threat to Indian Agriculture. In proceedings of National Workshop on "Heliothis management:" TNAU, Coimbatore, 1988.
2. RAMAKRISHNAYYA, B.V. and V. KRISHNAMURTY Distribution pattern of potassium in flue-cured

tobacco leaf. **Indian J.Plant Physiol.** 33(1):72-5, 1990.

3. SRIVATSAVA, R. P. and K. JHA. Changes in free amino acids during air-curing of Dixie Shade Wrapper Tobacco. **Tob.Res.**118(3): 20-1,1991.
4. MURTHY, K.S.N; J.A.V. PRASAD RAO and S.S. PRASAD పొగనారు పెంపకంలో పోషక పదార్థాల అవసరకత (Essentiality of nutrients for tobacco nurseries) **Annadata** 23(4): 47-8, 1991.

## TRANSFER

- Dr C.V. Raghavaiah, Scientist (SG) and Officer-in-Charge, CTRI Research Station, Vedaasur has been transferred on inter-institutional transfer to Directorate of Oilseeds Research, Hyderabad w.e.f. 4-6-91.

## APPOINTMENT

- Sri K. Venkateswarlu, AAO, Office of the Collector of Central Excise, Bangalore has been appointed as Finance & Accounts Officer on deputation basis at CTRI, Rajahmundry.

## DEPUTATION

- Sri R.P. Srivatsava, Scientist (SG), CTRI Research Station, Pusa has taken over the post of Director, Regional Pesticides Testing Laboratory, Kanpur, on deputation basis w.e.f. 17-6-1991.

## RETIREMENTS

S.No.	Name	Designation	Place	Reason	Date
1.	Sri S. Kandaswamy	T-I-3	Vedaasandur	Superannuation	30-4-91
2.	Sri M. Narasimha Rao	T-I-3	Rajahmundry	Superannuation	30-4-91
3.	Sri Balaswara Kapur	S.S.Gr.III	Pusa	Superannuation	30.4.91
4.	Sri K.G. Subedar	T-I-3	Rajahmundry	Superannuation	31-5-91
5.	Sri M. Perumal	S.S.Gr.III	Vedaasandur	Superannuation	31-5-91
6.	Sri P. Aravaraju	S.S.Gr.I	Rajahmundry	Superannuation	30.6-91

## KRISHI VIGYAN KENDRA

- A Training Programme on "Burley tobacco production technology in agency area of East Godavari district" was conducted on 23-4-91 and 150 supervisors of ITC / ILTD, Godfrey Phillip India Limited and Mittapalli Adinarayana & Co., and 25 local farmers participated in the programme. Dr. M.S. Chari pre-

sided over the inaugural function.

- In collaboration with ITDA, one training programme was conducted at Rampachodavaram for three days under watershed programme and 15 tribal farmers were imparted training.

## संक्षिप्त समाचार

### अनुसंधान उपलब्धिया

#### केन्द्रीय तम्बाकू अनुसंधान संस्थान, राजमन्दी

- सन् 1990-91 में पहली बार एफ.सी.वी. तम्बाकू पर गुलाबी एफिड महामारी के रूप में दिखाई दिया। यह एफिड आरगेनो फासफोरस कीटनाशियों के प्रतिरोधी बताये गये।
- रिडोमिल एम जेड 72 डब्लू पी. का 0.2 ओर 0.1 का पर्ण धिडकाव जमाव के 20 ओर 30 दिन के बाद करने पर यह तम्बाकू नर्सरी में पोषालन रोग को नियन्त्रित करने में बहुत अधिक उपयोगी रहा।
- एफ.सी.वी. तम्बाकू की पाइप लाइन किस्म वी-3189 व एल -1158 ने हैमा किस्म की तुलना में क्रमशः 37% ओर 24% अधिक संशोधित पत्तियों की उपज दी।
- हीलियोथिस आरमीजैरा पर प्राकृतिक शत्रुओं के प्रकोप पर किये गये अध्ययन के अनुसार पेस्ट पर पेरासिटाइजेसन का प्रतिशत केमपोलिटीस क्लोराइड चेलोनस फोरमोसेनस तथा एपेनटेलिस एफरीकानस के द्वारा क्रमशः 2-10, 5-14 ओर 7-30 तक रहा।

#### केन्द्रीय तम्बाकू अनुसंधान संस्थान, अनुसंधान केन्द्र, वेदसंदूर

- बीज व पोष उत्पादन ओरे आपूर्ति की विकास योजना के अन्तर्गत 2400 वर्ग मीटर क्षेत्र पोष उगायी गयी तथा 19.81 लाख पोषे किसानों को वितरित किये गये।
- तम्बाकू पर आधारित सस्यक्रम में खरीफ रागी के बाद खानेवाले तम्बाकू ने पडती - तम्बाकू (3.83 टन / हेक्टर) की तुलना में आधिक (3.91 टन / हेक्टर) उपज दी। क्रमिक सस्यक्रम के अन्तर्गत तिल, अरहर, सोयाबीन, तथा रागी ने प्रति हेक्टर क्रमशः 376 किलो, 831 किलो, 1387 किलो तथा 680 किलो उपज दी।

### टेक्नोलोजी का स्थानांतरण

#### केन्द्रीय तम्बाकू अनुसंधान संस्थान, अनुसंधान केन्द्र, पूसा

- दिनांक 13-6-91 को केन्द्रीय तम्बाकू अनुसंधान संस्थान के अनुसंधान केन्द्र पूसा पर इस केन्द्र तथा बिहार राज्य तम्बाकू उत्पादक सहकारी फेडरेशन पटना के सहयोग से “ बिहार राज्य में तम्बाकू विपणन की समस्याएं ” विषय पर एक गोष्ठी का आयोजन किया गया।

### अन्य विषय

- संस्थान तथा अनुसंधान केन्द्र के वैज्ञानिक तथा तकनिशियनों द्वारा 7 आकाशवाणी पर वार्ता दी गयी तथा 4 वैज्ञानिक / तकनिशियनों ने सिमपोजियम / प्रशिक्षण प्राप्त किया। 6 आगन्तुकों ने केन्द्रीय तम्बाकू अनुसंधान संस्थान राजमन्दी तथा अन्य अनुसंधान केन्द्रों को देखा। इस अवधि में 4 लेख पत्रिकाओं में प्रकाशित हुए।

### कृषि विज्ञान केन्द्र

- दिनांक 23-4-91 को आई.टी.सी. / आई.एल.टी.डी. गोडफ्रे फिलिप इंडिया लिमिटेड तथा मैट्टीपल्ली आदीनारायण कम्पनी के 150 पर्वेक्षकों के लिए “ पूर्व गोदावरी जिले के एजन्सी क्षेत्र के लिए बर्ली तम्बाकू उत्पादन प्रोद्योगिकी ” विषय पर एक प्रशिक्षण का आयोजन किया गया। इस कार्यक्रम में 25 किसानों ने भी भाग लिया। उदघाटन समारोह की अध्यक्षता डा. एम. चारी, निर्देशक के.त.अनु.स. ने की।