



C. T. R. I.

NEWS LETTER

Vol. 4 No. 2 NEWS LETTER OF CENTRAL TOBACCO RESEARCH INSTITUTE, RAJAHMUNDRY, JUNE 1982

Dry spell continued to prevail during the period under report. The rain-fall was 255.1 mm which is low when compared to the previous year's rain fall in that period.

Distribution of 5,765 kg of tobacco seed of the improved varieties viz. CTRI Spl. (2010 kg), Jayasri (1865 kg), CTRI Spl MR (725 kg) and Godavari Spl. (1165 kg) was done to the farmers in the districts of East Godavari, West Godavari, Guntur, Prakasam and Nellore through the Tobacco Board and State Agricultural Department.

MAJOR EVENTS.

Sri Ramesh Jha, the Hon'ble Minister for Agriculture and Minor Irrigation. Govt. of Bihar visited the CTRI Research Station, Pusa on 14th June '82 and made the following remarks :

" I am very much pleased to visit Central Tobacco Research Station, Pusa and impressed to learn about its well coordinated working with the objective of increasing income of small and marginal farmers by tobacco multiple cropping. I was given to understand that under Lab-to-Land Programme 65 farmers' families have been covered and 7 villages have been adopted. It is really laudable that the Station is striving to bring three fold increase in the current average yield of 12 quintals per hectare. The working of the Station is commendable and the officers and staff of this Station deserve all praises.

I wish them all success."

Dr. G. C. Patel, Agricultural Adviser, Jyothi Ltd., Baroda along with two members of the Quinquennial

Review Team, Dr. K. V. Srinivasan, Emeritus Scientist, Central Institute of Cotton Research Regional Station, Coimbatore and Dr. G. K. Veeresh, Professor of Entomology, University of Agricultural Sciences, Bangalore visited the CTRI Research Station, Dinhata and reviewed the work done at the Research Station on 18th and 19th May, 1982. Two more members, Dr. N. C. Gopalachari (Member Secretary), Director, Tobacco Research and Sri T. D. Prasada Rao, Research Manager, ILTD Divn. Rajahmundry joined the team at New Jalpaiguri and participated in the discussion,

Civil construction and electrical fittings of new Institute building of CTRI, Rajahmundry have been completed by CPWD in an area of 15 acres granted by Andhra Pradesh State Government, free of cost, for this purpose to ICAR. Insectary, cytology green house and pathology glass house were also constructed. Work on Central air conditioning is progressing briskly.

RESEARCH HIGHLIGHTS

C. T. R. I. Rajahmundry :



Quinquennial Review Team
inspecting cigarwrapper
tobacco leaves.

Burley is a tobacco type now in great demand in world market. As the area where the right type of Burley produced is very limited, efforts are being made to explore new areas where exportable type of Burley can be produced to cater to the increasing demands of the world. For this purpose a committee has been constituted by the Tobacco Board with Dr. N. C. Gopalachari, Director, Tobacco Research as the Chief Organiser along with the officials from Girijan Corporation and other Officials. The team surveyed the agency areas in and around Lambasingi, Paderu, Pedabayalu of Vizag district during 29th & 30th May 1982.

In light soils, for Burley tobacco, a spacing of 0.8m x 0.4m was superior to normal spacing of 1.0m x 0.5m and application of nitrogen at 100kg per ha was considerably better than 60 and 80Kg N/ha. Topping at 21 and 24 leaves resulted in significantly higher yields than topping at 18 leaves.

Three new predators of *S. litura* F. viz., *Rhinocoris squalis* Distant (Reduviidae) at Jeddangi, *Chrysopa crossinervis* Esben-Peterson (Chrysopidae) at Bapatla and *Anisochrysa boninensis* Okamoto at CTRI Farm, Katheru were recorded.

Root soak treatment for 1 hour with 0.1% Chlorpyrifos was found to be highly effective against tobacco stem borer, *Scrobipalpa heliopa* Low at Jeddangi. A cultivator can get a profit of Rs.550/- per ha by adopting this treatment.

Bulk trial in field indicated that post planting application of fungicides like Karathene 48 EC @ 0.1% and 0.2% Calixin @ 0.1% and Blitox @ 0.2% gave better control of orobanche and increased the cured leaf yield to a certain extent.

Work on breeding f. c. v. tobacco varieties, resistant to aphids, caterpillar as well as both the pests, through inter-specific hybridization using *N. gossei* as donor parent is progressing well and a large number of plants were isolated.

A bulletin on survey of flue-cured tobacco growing soils (heavy clayey and light sandy soils) of Krishna district has been prepared for the benefit of farmers and tobacco extension agencies. Areas in the district unsuited for tobacco, due to salinity, were also delineated.

CTRI Research Station, Guntur :

Locational trials on improved Natu tobacco lines. II-435 and II-426 confirmed the superiority in respect of leaf yield and quality.

CTRI Research Station, Kandukur :

Selection 2640-D was found to be TMV resistant and selection 2691-3 has combined resistance for both TMV and powdery mildew, hence they may be recommended for areas prone to these diseases.

Application of entire quantity of fertilisers (N, P, K) as basal in plant row-plough furrow was found to be significantly superior to dollop and broadcast methods and split application.

In a bulk trial L-430 was found to record significantly higher yields of all kinds followed by line L-423 and L-2691-3 as compared to variety Jayasri (control)

CTRI Research Station, Vedasandur :

Trials in the cigarfiller tracts of Tamil Nadu revealed that line HV 75-10 from the cross VV-2X Maryland was most promising and registered an increase in yield of 22.8% over the variety KV-1.

CTRI Research Station, Hunsur :

Mulching pre-sowing nursery beds with polythene sheet for a period of one month during summer reduced weed emergence and incidence of black-shank in f. c. v. tobacco nursery considerably resulting in increased yield of transplants.

CTRI Research Station, Dinhata :

The trials conducted at the Research Station as well as in the farmers' fields revealed that intercropping of Motihari tobacco + potato with water hyacinth mulch without irrigation, interculturing etc., proved to be more economical, remunerative and advantageous to the farmers of North Bengal.

LAB-TO-LAND PROGRAMME.

The Extension Fortnight under the joint auspices of CTRI and Andhra Pradesh Agricultural University was organised from 17th April, to 1st May '82 at Sri Venkateswara Anam Kalakendram, Rajahmundry. Sri A. K. Goyal, IAS, Collector, & Dist. Magistrate, East Godavari district was presided over the function and Dr. K. V. Raman, Dean Post Graduate studies of Andhra Pradesh Agricultural University was the Chief guest of the inaugural function. Kum. Chandana Khan, IAS, Sub-Collector also participated in the function. Special lectures were given by Dr. K. Jayaram Reddy, Zonal Coordinator, Lab-to-Land Programme, Sri T. Mallikharjuna Rao, Joint Director of Agriculture Kakinada, and Dr. K. Sankaram., Dy. Director of Animal Husbandry.



Sri A. K. Goyal, I. A. S., Dist. Collector, presiding over the function

A programme was conducted to impart training to the participant farmers on cultivation of paddy, sugarcane, tobacco, horticultural crops, besides maintenance of cattle and poultry and bee-keeping.

The second-phase of the CTRI Lab-to-Land Programme was commenced from the 1st June, 1982 and 200 farm families were allotted in four villages of Andhra Pradesh as follows :

Venkatanagaram (E. G. Dt) 50 families,

Achayyapalem (W. G. Dt) 50 families

Vengumukkalapalem (Prakasam Dt.) 50 families and

Vattigadda (Agency area of E. G. Dt) 50 families.

The second-phase of the E.G. Dt. Lab-to Land Programme which was jointly organised by the Andhra Pradesh

Agricultural University and State Department of Agriculture under the leadership of Central Tobacco Research Institute.

450 to 500 families were allotted for this purpose in 2 villages viz., Madhurapudi in Korukonda block and Namavaram in Rajanagaram block, selected in consultation with the concerned authorities. It is proposed to select all eligible families from these two villages for effective implementation of the various schemes of the programme for the benefit of the farm families,

At the CTRI Research Station, Vedasandur under Lab-to-Land Programme during 81-82, three centres were grown with Ragi in Kharif and tobacco in Rabi, It was observed that by adopting Ragi + Tobacco additional net returns of Rs 4,007/- alone was obtained



Tobacco after Ragi in Laxmanpatti

At the CTRI Research Station, Dinhat, demonstrations of triple cropping pattern (Aus paddy - Aman paddy - Motihari tobacco) in the fields of ten farmers selected under this programme have successfully been completed and improved technology transferred for adoption by the farmers,

The CTRI Research Station, Pusa has entered into the second-phase of the Lab-to-Land programme with 100 farm families belonging to small and marginal groups. Under this programme instead of traditional mono tobacco cropping, multiple cropping like maize-tobacco + garlic maize and tobacco plus sugarcane for irrigated and maize-tobacco + garlic - greengram or blackgram for rainfed areas will be propagated. Improved varieties, nursery practices, planting, irrigation and band placement of fertilizers will be demonstrated,

EXHIBITIONS

In connection with the 16th Anniversary of Farm & Home Broadcast of All India Radio, Vijayawada, an exhibition in the village Yedida of East Godavari of Andhra Pradesh was organised by CTRI, Rajahmundry, on 8th April, 1982 which was largely attended and appreciated.

CONFERENCES & SYMPOSIA

Dr. B. V. Ramakrishnayya, Head of the Division of Ag. Chemistry and Soil Science and Dr. J. Chaturvedi, Head of the Division of Ag. Extension participated in the 2nd All India Lab-to-Land Workshop held at Jawaharlal Nehru Krishi Viswa Vidhyalaya, Jabalpur on 14th and 15th May 1982.

Sri D. Ch. Rajarao, Documentation Officer, CTRI, Rajahmundry has participated in the three day Seminar and Exhibition on Management and Use of Micrographic/ Reprographic and Office equipment held at Visvesvariah Industrial and Technological Museum, Bangalore on 9th and 11th June 1982.

Dr. J. Chaturvedi, Head of the Division of Ag. Extension has attended the VII Indian Social Science Congress held at I I T. New Delhi from 12th to 15th June 1982 and presented a paper entitled "Effectiveness of communication media with reference to improved farm practices and crops."

Sri. T. S. N. Reddy, Scientist S-1 of the Institute has participated in the symposium on systemic fungicides in control of plant diseases in Indian Agriculture at Jabalpur on 17th and 18th June 1982.

TOBACCO INSTITUTE CLUB

The Tobacco Institute Club celebrated its 29th

Anniversary on 17th April 1982 at Sri Venkateswara Anam Kalakendram. The function was presided over by Dr. K. V. Raman, Dean, Andhra Pradesh Agricultural University, Hyderabad and prizes were distributed to the winners in Games and Sports by Dr. K. Jayarama Reddy, Zonal Coordinator, Lab-to-Land Programme.

President of the Club, Dr. N.C. Gopalachari welcomed the gathering and the Secretary of the Club, Dr. A. Gopalam read a report on the activities of the club. Variety entertainment programmes by the staff members, S/Sri T. K. Suryanarayana, B. V. V. Satyanarayana Murthy and PSN Murthy, were quite entertaining and largely applauded by the audience. Kuchipudi Bharatnatyam by Baby Nazeema and Sairabanu was very much appreciated by one and all. A 'mime' by the staff members was staged followed by light music by Smt. V. Satyavathi which was very delightful. A playlet by CTRI Research Centre, Devarapalli was very enjoyable. The programme came to an end with the vote of thanks by the Vice-President of the club Dr. J. Chaturvedi.



Dr. N. C. Gopalachari receiving prize for winning the Bridge Championship from Dr. K. Jayarama Reddy, Zonal Coordinator.



'A Mime' by the staff of CTRI, Rajahmundry



A Scene from the Playlet 'THERAVENUKA' by
The staff of CTRI Research
Centre, Devarapalli.

TRAINEES & VISITORS.

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| C. T. R. I., Rajahmundry | 22-5-82 | A batch of 68 trainees visited the Institute headed by Sri A. Kanthajah, Asst. Director of Agriculture, VDO's Training Centre, Hyderabad. | Ministry of Agriculture Lesotho, Africa, visited the station. |
| CTRI Research Station, Hunsur | 28-5-82 | | Trainees from Rural Development Training Centre, Kudige, Coorg Dist. visited and training was imparted to them in f.c.v. tobacco nursery management. |
| CTRI Research Station, Kandukur | 5-6-82 | Sri G. Subrahmanyam, Asst. Director of Agriculture (Tobacco) visited the station. | 31-5-82 Sri Babu Reddy, IAS, Executive Director, Tobacco Board, Guntur visited the Station. |
| | 24-6-82 | Sri G. V. Narayana Murthy, Regional Joint Director, Animal Husbandry, Nellore. | |
| | 19-4-82 | M/s E.M. Nohae, Sello Letsie, S. N. Nthethi, T. Sekhonyana, R. T. Selahla, R. M. Ramosajana and C. Moahloli, delegates from the | C.T.R.I. Research Station Pusa 16-6-82 Dr. M. V. Rao, DDG (CS), ICAR, New Delhi paid a visit to the Research Station. |
| | | | 16-6-82 Dr. J. P. Singh A.D.G., (Horticulture) ICAR New Delhi visited the station. |

HONOURS AND AWARDS

Sri J. A. V. Prasada Rao, Scientist S-1 was awarded ph. D. in Chemistry by the Andhra University for his thesis entitled "Analytical studies on the influence of crop sequences on the soil and crop characteristics with reference to the flue-cured virginia tobacco (*Nicotiana tabacum*)."

Sri S. R. Prabhu, M. Sc., M. Tech, Scientist S-1 was awarded Ph. D., in Chemistry by the Andhra University for his thesis entitled "Chemical investigations on some aroma-bearing and aromaprecursor compounds in flue-cured tobacco."

Sri R. V. S. Prakasarao has been adjudged as the *Best Administrative Worker* and was awarded the "Rolling Cup" donated by Sri J. Suryanarayana, former Administrative Officer of the Institute.

APPOINTMENTS & TRANSFERS

1. Sri J. Sivasai, S. S. Gr. I has been promoted to the post of Technician T-1 w. e. f. 6-5-82.
2. Sri B. Suryanarayana Reddy S. S. Gr. I has been promoted to the post of Technician T-1 w.e.f. 5-5-82.
3. Sri N. Sambasiva Rao has been appointed to the post of Technician T-1 (Gestetner operator) w. e. f. 14-5-82.
4. Sri V. V. Madhavarao has been appointed on compassionate grounds to the post of Technician T-1 (Curer) w. e. f. 9-6-82.
5. Sri M. Unnikrishnan, Scientist S-1 (Gen. & Cytogen), CTRI, Rajahmundry has been transferred to CTCRI, Trivandrum on request and mutual basis *vice* Sri. T. Venkateswarulu, Scientist S-1 (Genetics & Cytogen.), CTCRI, Trivandrum transferred to CTRI, Rajahmundry.
6. Sri B. Vishnumurthy, Sr. Clerk, CTRI, Rajahmundry has been promoted as Assistant w. e. f. 23-6-82.

7. Dr. K. V. Satyanarayana, Scientist S-3 (Gen. & Cytogen), CTRI Rajahmundry has been transferred to CTRI Research Station, Kandukur.
8. Sri D. S. Sastry Asst. Administrative Officer, CTRI Rajahmundry has been transferred to CTRI Research Station, Kandukur.

RETIREMENTS

Sri R. Parameswaran, SS. Gr. III (Lab Attender), CTRI, Rajahmundry has retired from Council's service w. e. f. 30-6-82 AN on attaining the age of superannuation.

RESIGNATIONS

Sri J. Mohankrishna, Jr, Clerk, CTRI, Rajahmundry has resigned the post w. e. f. 14-6-82.

PAPERS PUBLISHED.

1. Dewfall and its role in leaching down some tobacco constituents.
M. Sannibau, B. V. Ramakrishnayya, and N. C. Gopalachari
Science & Cult 48 (3) :101-2, 1982.
2. Isolation and identification of toxic materials from *Nicotiana glauca*.
S. R. Prabhu, M. K. Chkraborty, S. Sitaramaiah & B. G. Joshi
Tob. Int. 183 (24) :66-9 1981.
3. Control of cigarette beetle in tobacco seed storage
K. N. Rao
Indian Tob. J. 13 (3) : 11-2, 1981.
4. Influence of Potassium & Magnesium on yield and some physical characteristics in cigar wrapper tobacco.
K. D. Singh and B. L. Singh.
Indian J. Agric. Sci. 52, 6: 1982, June :388-391,

Edited & Compiled by Shri. A. HARANATH