



C. T. R. I.

NEWS LETTER

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MAJOR EVENTS

The Indian Council of Agricultural Research has sanctioned 'KRISHI VIGYAN KENDRA' for Rajahmundry and is under the Administrative control of the Director, CTRI. It has been located in the permanent old CTRI buildings near A.P.P. Mills. The main purpose of the Kendra is to offer skill-oriented vocational training in improved production technology in annual and horticultural crops to the farmers. The Kendra also imparts training in dairying, animal husbandry, poultry farming, bee-keeping, fisheries and other relevant areas for the workers engaged therein and also imparts training to the inservice extension staff. The Krishi Vigyan Kendra at Rajahmundry will be the second of its kind in Andhra Pradesh, the first having been located at Hyderabad. The establishment of Krishi Vigyan Kendra at Rajahmundry is expected to meet the needs of East and West Godavari districts' farming community.

RESEARCH HIGHLIGHTS

CTRI, Rajahmundry.

An improved variety G-11/1 was found quite promising and suitable for closer spacing in black soils with higher bright grade out-turn and TBLE than the existing standard varieties.

An interesting project started in 1982-83 season to find out the effect of air-curing on Virginia tobacco grown on the black soils, to save on fuel for curing, has shown that curing under white alkathene shade was the best for maintaining acceptable levels of sugars and nicotine and the variety G-11/1 is the best with regards to the cured leaf yields.

A number of promising mutants have been isolated from the variety Speight G-28 and they are undergoing yield assessment trials. An attempt is being made to improve the yield and quality of Burley varieties through

mutation breeding. Two selections evolved through pollen culture namely D1 and D2 are also being assessed for yield potential.

Five years investigations have shown that neem seed kernel suspension (NSKS) at 0.5% concentrate can be recommended for protecting the f.c.v. tobacco crop against *Spodoptera litura* F. The material does not affect either the yield or quality characters or smoking quality of the leaf. The material is indigenous and five times cheaper than any of the recommended pesticides.

CTRI Research Station, Guntur.

The Research station has taken up varietal trials, for the first time, on the improved lines of Natu tobacco at Nandyal (Kurnool District), where line II-426 has fared very well as compared to the local variety W.A.F.

The solar air-drying system for curing of tobacco, a project in collaboration with Nagarjuna University, was inaugurated by Dr. K.R.R. Mohan Rao, Vice-Chancellor of Nagarjuna University on 8th March, 1983.

CTRI Research Station, Kandukur.

In final evaluation trial conducted over four years the variety MDC-17 proved superior to other seven varieties in the trial in respect of cured and bright grade leaf production, and was followed by Spt. G. 140, MDC-20 and Lonibow. Other three varieties were found on par with local control variety Sp. cross.

CTRI Research Station, Veda sandur.

Application of Diphenamide at 15 Kgs/ha gave the highest yield of 38.42 quintals/ha. One hand weeding on the 25th day gave 34.8 quintals as compared to unweeded control which gave only 16.26 quintals/ha.

CTRI Research Station, Hunsur.

By recombination breeding FCH-37, a high yielding FCV tobacco line has been developed. In the trials conducted, the new line exhibited mean yield potentials of 2092, 1681 and 1806 Kg./ha of total cured leaf, bright



Dr. K..R. R. Mohan Rao, Vice-Chancellor addressing the gathering.

grade leaf and TBLE respectively, being 22, 26 and 33 per cent higher than line 1494, the control line presently proposed for release.

CTRI Research Station, Pusa.

Planting of Hookah tobacco on 10th October was found better for the yield and quality of leaf than the late plantings.

Application of 0.5 to 1.5% NAA reduced the suckers and increased the yield of chewing tobacco significantly.

CTRI Research Station, Dinhat.

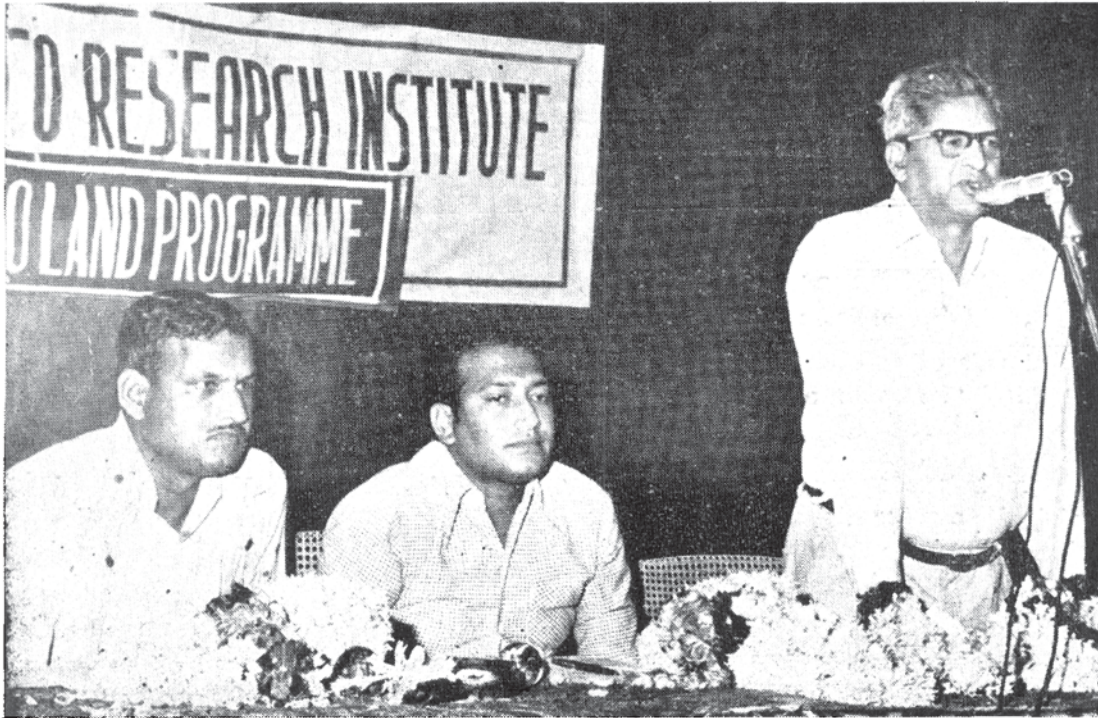
Chlorpyrifos 20 EC @ 0.03% or Endosulphon 35% EC @ 0.04% or Quinalphos 25 EC @ 0.03% applied two times on 15th and 35th day after transplanting, effectively controlled the cutworm damage in wrapper tobacco fields of North Bengal region.

Lab to Land Programme.

In connection with the Lab to Land programme, Farmers' Day celebrations were held at Atchayyapalem (West Godavari), Venkatanagaram (East Godavari) and

Institute's Black-Soil Farm at Katheru on 18th, 22nd January and 5th February, 1983 respectively. Critical inputs like seedlings, fertilizers etc. were distributed to the farming families selected, while keeping in view the technology developed for light soil and black soil grown FCV tobacco respectively.

Under the 20 point programme much emphasis was given to improve the conditions of the economically weaker sections of the farming community. For this purpose a village viz. Suryaraopet (Rajanagaram Samithi, East Godavari District) was selected and 75 small and marginal farmers' families were adopted by this Institute and they were classed under different crop enterprises viz. dry paddy cultivation, pulses cultivation, and oil seed cultivation. These farm families were supplied necessary inputs, improved seeds, coconut saplings and were given demonstrations of the high yielding varieties of the crops and explained about the monetary benefits. The farmers who are having tobacco cultivation are being supervised periodically and transferring the latest methods in the package of practices of FCV tobacco cultivation for obtaining remunerative prices for their good quality produce.



Dr. N. C. Gopalachari, Director CTRI, addressing the audience at Venkatanagaram on 22nd Jan. 1983 in connection with the Farmers' Day celebrations.



Sri P. Seshagiri Rao, opening an Exhibition at Katheru farm on 5th February, 1983 in connection with the Farmer's Day celebration.

CTRI Research Station, Pusa.

Under Lab. to Land programme, tobacco farmers' extension fortnight was organised from 17th to 31st January, 1983 to disseminate improved technology of

tobacco cultivation to farmers of the region. During that period, programme of farmers' gosthi, visit of crop demonstration, tobacco crop competition, display of tobacco leaf and exhibitions were organised in different villages.



Dr. U. C. Upadhyay, Asst. Director General (E) ICAR, New Delhi, addressing the Farmers' Day celebration on 31st January, 1983 at C T R I Research Station, Pusa.

Dr. Maharaj Singh, Dy. Director General (Edn.), ICAR, has visited the Research Station on 24-1-83 and made the following remarks in the Visitors Book.

"The laboratories are well equipped and maintained. The field plots and premises look good and well kept; staff appears to be enthusiastic and well informed. On the whole one gets an impression of a dynamic and cohesive research and development team".

CONFERENCE & SYMPOSIA

The XV Management Committee meeting was held at C T R I Research Station, Vedasandur (Tamil Nadu) on 5th March, 1983. The meeting was attended by Dr. N. C. Gopalachari, Director, C T R I & Chairman of the management Committee and the following members Dr. T. P. Sriharan, Scientist S. 3, ICAR, New Delhi; Sri P. Mohanrao, Hyderabad; Sri J. Joshi, Guntur; Sri T. V. Achari, Accounts Officer, CRRI, Cuttack; Sri K. Balagopal, Scientist S. 2, Sri C. R. Nageswararao, Scientist S. 1 and Sri S. Seshagiri, Senior Administrative Officer, C T R I, Rajahmundry.

Dr. D. V. Subba Rao, Head of the Division of Statistics, C T R I, Rajahmundry has participated in the 36th Annual Conference conducted by the Indian Society of Agricultural Statistics held at Mahatma Phule Krishi Vidyapeeth, Rahuri.

Sri K. S. N. Murthy, Head of the Division of Agricultural Chemistry and Soil Science, C T R I, Rajahmundry has participated in the N. 15 workshop organised by the Nuclear Research Laboratory, I A R I, New Delhi.

Dr. R. Sinha Officer-in-charge and Sri R.P. Srivastava, Scientist S-1 (Chem.) C T R I Research Station, Pusa and Sri S. N. Tripathi, Scientist S-1. C T R I Research Station, Guntur have participated in the 70th Session of the Science Congress held at Sri Venkateswara University, Tirupathi and presented the following papers.

1. Sinha, R. Dwivedi, S. S. L. and Pandey, A. K. (1983). Comparative performance of chewing tobacco



Management Committee meeting was held at C T R I Research Station, Veda sandur on 5th March, 1983.

Sri K. Nageswara Rao, Scientist S. I. Plant Physiology, C T R I, Rajahmundry has participated in the International Seminar on 'Plant Physiology in coming years' organised by the Indian Society for Plant Physiology, I A R I, New Delhi.

(*N. tabacum L.*) in various cropping patterns under rainfed conditions of North Bihar.

2. Sinha, R. Dwivedi, S. S. L., Pandey, A. K. and Jha R. C. (1983). Growth and yield pattern of hookah

tobacco (*N. rustica* L.) under different dates of planting and topping levels.

3. Srivastava, R. P. (1983). Quality of cigar-filler tobacco of West Bengal based on physico-chemical properties.
4. Tripathi S. N. Influence of Soil moisture and plant spacings on growth, yield, quality and economics of cigar filler tobacco (*N. tabacum* L).

TRAINEES & VISITORS

CTRI Rajahmundry :

One day Refresher training programme was arranged to the Extension Agricultural officials and Village Development officials deputed by the Assistant Director of Agriculture (T&V), Rajahmundry on 2nd February, 1983.

Sri Y. V. Suryanarayana, Asst. Librarian, CTRI, Rajahmundry has undergone training of 18th National Programme on Information Storage and Retrieval Systems (ISRS) from 10th-28th January, 1983 at Small Industry Extension Training Institute, Hyderabad conducted by SIET Institute, Hyderabad.



Director, with a team of Scientists from CTRI, visited FCV tobacco producing areas of West Godavari, Krishna, Guntur, Prakasam and Nellore Districts from 27th to 29th January, 1983.

Four week Curer training programme has been arranged on curing FCV tobacco. The farmers FCV training were deputed by the Tobacco Board during the period from 17th January to 16th February, 1983.

6-1-83 Mr. Jenuny Gee and M. A. Mokaddem, Bangladesh Tobacco Co., Dhaka.

2-2-83 Sri K. S. Sastry and Mr. Chuiing Mai, Thailand.

8-2-83 Sri M. H. Rao, P. P. O. S., Faridabad.

17-2-83 Sri K. S. Vaidyanathan, Asst. Manager, I T C, New Delhi.

23-3-83 Sri H. Narasimhamurthy, Additional Director of Agriculture, O. O. D. Managing Director, Mysore Tobacco Co., Ltd. Bangalore.

CTRI Research Station, Guntur :

Eleven trainees, sons of the farmers from Prakasam District sponsored by the Tobacco Board, Guntur were given training for one month on curing, grading and baling of f. c. v. tobacco at the Research Station.

25-1-83 A batch of Agmark officials headed by Sri D. P. Singh, Marketing Officer.

4-2-83 Sri B. N. Dayanand, Asst, Agricultural officer (Tobacco Development), Director of Agriculture, Bangalore (Karnataka) visited the farm along with 40 farmers of f. c. v. tobacco of Karnataka State.

7-3-83 Sri Vijay Rai Singh and Sri Sanjay Singh, Management trainees from M/s. Godfrey Philips India-Bombay.

CTRI Research Station, Kandukur :

Seven candidates (tobacco growers and their wards) from Prakasam District sponsored by the Tobacco Board were imparted training in curing, grading of f.c.v. tobacco for one month from 18th January to 16th February, 1983.

8-2-83 Forty farmers from Karnataka State along with the officials of Department of Agriculture, Karnataka and Andhra Pradesh.

26-2-83 A group of tobacco farmers of Prakasam District along with officials of the Department of Agriculture.

1-3-83 Dr. G. J. Patel, Project Coordinator, AICRP (tobacco), Anand.

CTRI Research Station, Vendasandur :

21-2-83 A batch of thirty eight students of III year B.Sc. (Ag.)

26-2-83 A batch of thirty five trainees from the Agricultural school, Aduthurai.

CTRI Research Station, Hunsur :

A group of forty Agricultural Assistants from Rural Development Centre, Mandya visited and underwent training in improved package of practices of f. c. v. tobacco cultivation.

CTRI Research Station, Pusa :

24-1-83 Dr. Maharaj Singh, DDG (E), ICAR, New Delhi.

24-1-83 A team of thirty Sr. Scientists including Directors of Research and Development of different States.

31-1-83 Dr. U. C. Upadhyay, ADG (E), ICAR, New Delhi, Dr. K. K. Jha, Vice Chancellor, Rajendra Agricultural University, Bihar.

16-3-83 Dr. Nawab Ali, Project Coordinator, Post Harvest Technology Scheme, CIAF, Bhopal.

HONOURS & AWARDS

Sri R. Varadarajan, Assistant, CTRI, Research Station, Vendasandur has been adjudged as the 'Best Administrative Worker' for the year, 1982 and awarded the Rolling Cup donated by Sri J. Suryanarayana, Ex. Admn. Officer, CTRI, Rajahmundry.

Sri A. Hanumantha Rao, Technician T-4, was elected as Associate of Institution of Chemists (India).

APPOINTMENTS & PROMOTIONS

1) Sri S. Seshagiri, has assumed the charge of Senior Administrative Officer at CTRI, Rajahmundry with effect from 10-1-1983.

2) Sri S. Krishnamurthy, Officer-in-charge, CTRI Res. Station, Vendasandur assessed and promoted to Scientist S-3.

- 3) Sri M. Someswararao, CTRI, Rajahmundry assessed and promoted to Scientist S-2.
- 4) Dr. (Mrs.) U. Subhashini, CTRI, Rajahmundry assessed and promoted to Scientist S-2.
- 5) Sri K. S. N. Murthy, CTRI, Rajahmundry assessed and promoted to Scientist S-2.
- 6) Sri V. V. Ramanarao, CTRI, Rajahmundry assessed and promoted to Scientist S-2.
- 7) Sri N. S. Murthy, CTRI, Rajahmundry assessed and promoted to Scientist S-2.
- 8) Sri K. D. Singh, CTRI, Res. Station, Kandukur assessed and promoted to Scientist S-2.
- 9) Sri G. S. V. Subrahmanyam, CTRI, Rajahmundry assessed and promoted to Scientist S-1.
- 10) Sri C. R. Nageswararao, CTRI Rajahmundry assessed and promoted to Scientist S-1.
- 11) Sri S. S. Gossain has been appointed as Tech. T-1 (Tractor Driver) w. e. f. 15-2-1983 at CTRI Research Station, Hunsur.

DEATHS

- 1) Sri Vishnudeo Rai, S. S. Gr. II, CTRI Research Station, Pusa expired on 8-1-1983.
- 2) Sri Madusudan Das, S. S. Gr. II, CTRI Research Station, Dinahata expired on 21-3-1983.

LIST OF PAPERS WERE PUBLISHED DURING THE FIRST QUARTER of 1983

1. Genetics of associated white flower and white seed characters in *Nicotiana tabacum* L.
K. V. Satyanarayana, R. Lakshminarayana, K. V. Krishna Murthy and R. B. Narayana Rao.
Tob. Int 184 (21) : 29-31, Oct 15, 1982.
2. Problems and progress in flue-cured Virginia tobacco breeding in India.
Satyanarayana, K. V. Lakshminarayana, R and Narayana Rao, R. B. Tob. Res 8 (2) : 131-9, Dec 1982.

3. Effect of Cytoplasmic male sterility from *Nicotiana undulata* on yield, yield components, chemical and physical quality characteristics of flue-cured tobacco genotypes.

A. B. Sastry; C. Venkata Rao; P. V. Prasada Rao, A. S. Krishna Murthy; A. Hanumantha Rao, B. V. V. Satyanarayana Murthy and I. B. Ram Mohan Rao.

Tob. Res. 8 (2) : 173-7, Dec 1982.

4. Effect of different crop sequences under rainfed conditions with reference to FCV tobacco on the uptake of phosphorus, potassium, calcium and magnesium by different crops.

Prasada Rao, J. A. V. and Gopalachari, N. C.

Tob. Res. 8 (2) : 140-8, Dec. 1982.

5. Effect of different crop sequences under rainfed conditions with reference to FCV tobacco on the chemical and physical quality characteristics of tobacco leaf.

Prasada Rao, J. A. V. and Gopalachari, N. C.

Tob. Res. 8 (2) : 148-59, Dec. 1982.

6. The effect of methods of harvest and curing on yield and physico-chemical characteristics of Burley tobacco.

Nagaraj, G; Chakraborty, M. K; Someswara Rao, M, Venkatachari, M. V. V. S. S.

Tob. Res. 8 (2) : 160-73, Dec. 1982.

7. Chemical quality characteristics of Chewing tobacco (*Nicotiana tabacum*) grown in Bihar State.

A. G. K. Murthy and N. C. Gopalachari.

Tob. Res. 8 (2) : 178-81, Dec. 1982.

8. Alkaloid composition of some Indian Tobacco types
Nagaraj, G and Sridevi Nagarajan.

Tob. Res. 8 (2) : 182-4, Dec. 1982.

9. Tobacco cultivation, improvement and utilization of tobacco waste for production of nicotine.
C. V. Narasimha Rao and M. K. Chakraborty.

In, cultivation and utilization of medicinal plants, Edited by Atal, C. K, and Kapur, G.M. P. 669-79.

Jammu Tavi. RR Labs. 1982. 877 P.

10. Maintenance of *Orobanche cernua* on brinjal plants.
R. S. N. Rao; B. G. Joshi and C. B. Sarma.
Indian J. Agric. Sci. 52 (11) : 764-7. Nov. 1982.
11. Record of *Chrysopa (Apertochrysa) crassinervis* esben-peterson from India
R. S. N. Rao.
Curr. Sci. 52 (9) : 438-9. May 5, 1983.
12. Curing of Virginia tobacco with sawdust briquettes as fuel.
N. C. Gopalachari; B. Nageswara Rao and T. Sitaramachari.
Tob. Res. 8 (2) : 196-8. Dec. 1982.
13. Further improvement in solar curing barn.
N. C. Gopalachari. B. Nageswara Rao and T. Sitaramachari.
Tob. Res. 8 (2) : 198-200, Dec. 1982.
14. Cultural studies in cigar filler tobacco Pennbel-69.
Krishnamurthy, S; Bala Gopal, K; Abi Baran Singh Baskar and R. Subba Rao.
Tob. Res. 8 (2) : 187-91, 1982.
15. Effect of slow release N-Fertilizers and nitrification inhibitors on chewing tobacco and on succeeding maize.
Sinha, R; Dwivedi, S.S.L and Pandey, A.K.
Tob. Res. 8 (2) : 107-8, Dec. 1982.
16. Intercropping of tobacco and sugarcane in North Bihar.
Sinha, R; Mishra, R. N; Pandey, A. K; and Dwivedi S, S, L,
Tob. Res. 8 (2) : 119-31, 1982.
17. Comparative performance of different cropping sequences with motihari tobacco (*Nicotiana rustica* L) in relation to yield quality, economic return and soil fertility.
Pandey, R. G. Singh, K. D; Bhattacharjee, A. K; Sitaramachari, T
Tob. Res. 8 (2) : 97-106, Dec. 1982.
18. Chemical composition of the leaf of cigar wrapper tobacco as influenced by its position on the stalk.
R. P. Srivatsava.
Indian J. Agric. Sci, 53 (1) : 62-65, Jan, 1983.

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